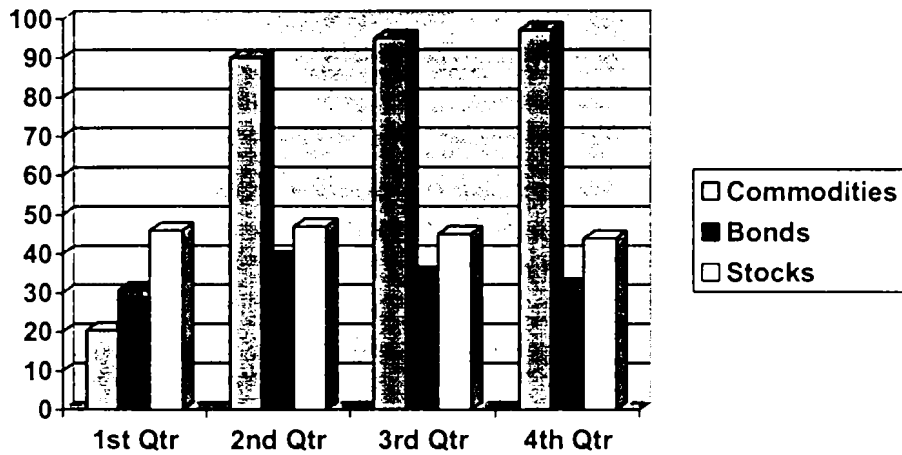


First Quarter Training Materials

January 2001

LESINV

TRAINING MANUAL



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1. **General Market Theory:**

What is technical analysis?
Comparison of technical and fundamental analysis
Basic premises of technical analysis
Advantages of using technical analysis
Criticism of technical analysis
The Dow theory
Trading mania

2. **Charting Fundamentals:**

Types of charts
Daily bar chart
Using daily bar charts
Support and resistance levels
Identifying support and resistance levels
Trend lines
Retracements
Reversal days
Price gaps
Point and figure charts
The Elliot Wave Theory
Fibonacci numbers
Cycles

3. **Chart Patterns:**

Types of patterns
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Rounded top and bottom
V-formation or spike
Continuous Patterns
Symmetric triangle
Ascending and declining triangle
Flag and pennant
Wedge
Rectangle
Continuation head and shoulders
Candlestick Charting
Confirmation of the Analysis

TRADING STRATEGIES 101

COURSE OUTLINE

4. **Technical Indicators:**

- Introduction
- Moving Averages
- Moving Averages Difference Oscillator
- Relative Strength Index
- Momentum
- Stochastics
- Bollinger Bands
- Pivot Point Analysis
- Volume and open interest
- Historic volatility
- Advance/decline Line
- Overbought/Oversold Indicator
- Advance/Decline Volume Line
- TRIN – Short Term Trading Index
- Comparative Strength Index
- Call/Put Ratio

5. **Trading System Development:**

- Introduction
- Basic Examples of a Rule-Based Trading System
- Trading Systems and The Computer
- Developing the Trading System
- Setting, Entry and Exit Rules
- Slippage, Commissions and Bad Luck
- Optimization and Curve-Fitted Trading Patterns
- Trading System Example

6. **Money Management**

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- How Much to Risk On Each
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- The Use of Smaller Contracts
- Using Stop Orders to Protect Against a Loss
- Stop Placement

TRADING STRATEGIES 101

COURSE OUTLINE

6. **Money Management (Continued):**

Risk Reward Ratio

Ride Your Winners/Cut Your Losses

Psychological Factors

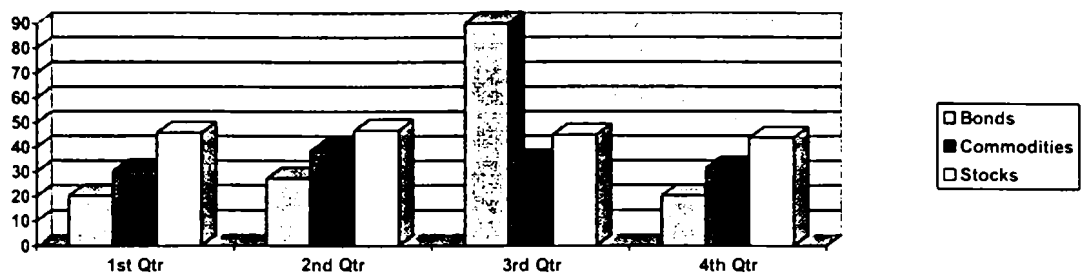
Margin Calls

Pyramiding

Equity Curves

Mock Trading

Cautions About Trading The Markets

TRAINING COURSE MANUAL

The theme of this course is to learn how markets function, how data is compiled, and how to trade for profit. Trading system development comprises 25% of successful trading, whereas money management accounts for 75 % of successful trading.

The Chicago Mercantile Exchange was organized in 1982, funded by 100 million shares as a hedge. The Standard and Poor's began as a futures trading institution. Trades on this exchange are handled through Brokerage Clearing Houses like First American as well as others. The reasons for being in the market are for hedging and speculation.

All Mutual funds use these vehicles to hedge with futures and options. The current trading volume is so high because everyone is now doing it. Speculators only control 10% of the money invested compared to 90% that hedgers control.

The S&P 500 contract costs \$11,000 to own in an overnight trading situation. A day trade only, can be controlled with half that amount. The cost leverages approximately \$233,750.00 1 point of movement=20 ticks. 1 tick = \$25.00. 1 point = \$500.00. Say the Market trades at \$483.40 when you buy one contract. It goes up to \$483.90, and you sell. The difference \$483.90 minimum \$483.40 equals \$.50. \$.50 divided by 5 equals 10 ticks. 10 ticks x \$25.00 = \$250.00 profit. Money can be made or lost depending upon which way the market goes, up or down. Successful traders learn to recognize patterns that tell them whether to buy long or sell short. Trades are always made with stops set at 9% of order so that reverse trends do not wipe out the principal. The S&P contracts are changed every three (3) months – March, June, September, December, on the third Friday of that month.

An important indicator of the market's trend is the Premium. The Premium is defined as the difference between the Cash value of the S & P, which is an indexed average of 500 selected stocks, and the current quoted market price of the current future. When the premium is **low** or **negative**, the market is **bearish**, when the premium is **high, near or over 1.0**, then the market is **bullish**. **Bearish means that prices are dropping, bullish means that they are rising.**

The Premium combined with Pattern Recognitions provides the framework for making decisions whether to buy long or sell short. Pattern recognition theory is provided in the printed handout titled

“Watching for Chart Patterns”. When the patterns develop into a “go” mode, reference the Premium to see if the pattern agrees with the mode. Then check the Bond Market to see if the trend is the same direction. If so, and all three of these indicators are similar, then a favorable trading situation exists. If the bonds are diverging with the S&P, or if the Premium is out of synch, then the chart pattern has a much lower likelihood of being successful. A reading of .88 is about average for the Premium. At 1.22, a buy deluge will usually occur. At .61 selling sets in. Many institutional programs are triggered by the Premium. Use this margin with Pattern Recognition to make decisions.

- When the premium is very narrow, an explosive situation develops for a large drop.
- When the premium is very wide, a situation develops for a large increase.
- This variable is extremely important to corroborate trading.

The S&P trades from 6:30 a.m. to 1:15 p.m. Pacific Time. The futures market trades 15 minutes longer than the stock market. The U. S. Bonds Market trades from 5:30 a.m. To 12 noon Pacific Time. The S&P is attractive to investors because it produces the clearest patterns because of the volatility of so many trades. Mutual funds use it to manage their portfolios.

The S&P has a 15-point limit move that will stop all trading for 15 minutes, then another 15-point move. This was instigated to prevent huge movements. Program trading is not allowed by the SEC (Securities Exchange commission) if the Dow moves up or down by 50 points. At that point, all computers must be turned off. Contracts are notated by SPZ (December), SPH (March), APM (June), APU (September). These contracts expire on the 3rd Friday of these respective months. The week of this 3rd Friday is called rollover week—(bad time to trade). Overnight contracts must be rolled over. Generally, though, overnight contracts are not a wise investment because of the volatility factors and the possibility of gap openings.

Money Management

Without a system, trading will only lead to bankruptcy. It is important to trust the system. LOOK for the Patterns. Wait-wait for the patterns to develop. If you study the 5-minute patterns, it will only take a few minutes to recognize the system patterns. Take a few hours and see how the S&P's trace out their patterns. The patterns are 80% of your decision to enter or exit the market. The other 20% is based on bullish or bearish divergence, support and resistance areas and how other markets are behaving. You can learn an amazing amount of information about how the markets work simply by observation. Hours and hours of observation count for good trading. You don't need very many trades to make impressive rate of return over the months. But, you must be very patient and WAIT, WAIT, WAIT.

Keeping a journal is helpful supplemental reading, concentrate on Credit Markets.

Study the Terms handout.

Unemployment Numbers

The first Friday of the month is the unemployment number. This number is a percentage of the population of the United States that is unemployed. This number is released at 5:30 a.m. Pacific Time. It has a big impact on the bond market and also on the S&P because the S&P usually follows the bond trend. The bonds can move as much as a point in 2 minutes. The day before this number percentage is

released; the stock and bond markets are very quiet. The unemployment figure is equated to inflation. The more people that are employed over the previous month, **the bonds react by going up. If more people are employed that before, then the bonds can go down.** The key is to understand not only how many unemployed there are, but also how inflation is perceived. Many factors work on inflation, from the balance of payments deficit, to the national debt, to the value of the dollar compared to other currencies, like the Yen, the Deutsch Mark, the Swiss Franc, etc. When the dollar falls, these and other currencies rise.

The Federal Reserve want to keep the overall economy growing at a slow steady upward pattern, while keeping inflation low. Thus, having some people out of work is part of the equation of keeping this balance.

Upon the release of this unemployment percentage number, large fluctuations occur and attention needs to be paid to pattern development. Don't trade the day before. Wait for something predictable to form.

There are two pieces of information that come with the unemployment number:

1. The number represents the percentage of unemployed workers in the workforce who are looking for work and can't find it.
2. The other is non-farm payroll, which represents how many new people have applied for unemployment checks in the part week. It is expressed in thousands, such as 170,000 new people looking for work.

Patterns

See Patterns Handout.

Generally, currency trades develop over longer periods of time, but then bonds take time to develop, too, but the S&P is much more volatile and the patterns development more quickly. Five (5) minute patterns are necessary for good backup and oversight. As many charts as can be analyzed are helpful. But one is limited by ones' equipment and personnel. The overall combination of charting provides intermarket analysis. What one market does affects what other markets do. How these markets work in conjunction with each other is the subject of the following pages.

We'll start with the Bonds Market. One contract of bonds costs @ \$2,700.00. There are 31 ticks per point in the calibration of the market (configuration). Each movement of one (1) tick = \$31.25. The interest rate market is the largest financial market in the world. The Bonds Market sets the index for interest rates. Everything in our economy and world economies depends on borrowed money. Home loans, car loans, credit cards—all this is debt packaged together and sold as bonds to pension funds, muni funds, mutual funds, etc. All have prices that change by the second.

The contract that we analyze is the Futures contracts for the Treasury Bonds. There are many types of bonds. But this futures contract is based on the index tied to the government's auction of debt. . . . so, when buying or selling millions of bonds, small fluctuations makes a difference. To measure that, the futures exchange was created to lend the stability of time to the markets. Because the U. S. Government is the largest institution around, trends are created by what the government does or does not do. And because world economies are more and more tied to each other, understanding how other markets are behaving are important to trading bonds and vice versa. The main influence on bonds is inflation. Low

inflation means lower interest rates and higher bond prices. Generally, with an increase in inflation, percent (%) interest rates will rise and bonds will go down in value.

Therefore, as futures traders, you will want to watch all the commodities that predict inflation. The Commodity Research Bureau or CRB Index is another important indicator to look at. The CRB comprises that the grains, the meats, gold, energies, lumber, coffee, orange juice, etc. Twenty-one (21) commodity prices make up this index.

Caution, this index is weighted towards the grain markets. So it is not the best overall inflation indicator. The gold market is also important to monitor. As gold rises, bonds drop and vice versa. Gold and the CRB are inversely related. Sometimes the bonds match one commodity tick for tick. A good example occurred during the Gulf War. The bonds reacted to every tick in the price of oil. Now the bonds don't pay much attention to oil. At times bonds will not react to inflation indicators, particularly when these markets have been in narrow trading ranges for a while. Keeping up on other markets is important. When currencies top, bonds bottom and vice versa. So, then the dollar (\$) drops, bond traders get nervous because they are concerned that the Fed will raise interest rates in order to support the dollar (\$). So, the simplistic formula is lower dollar, lower Bond prices, stronger dollar, and stronger bond prices. But, remember these two markets do not operate lock step. Just because currency markets go up 10 ticks, it will not send the bond market lower. However, if there are large movements, downward pressure will be put on the bonds. In 1994, the bonds trended lower. In October of 1994, the currencies topped out and the bonds bottomed out a few weeks later. Dailies show most clearly the long-term trends.

Interrelated Markets

Short-term interest rates affect long-term interest rates. The short-term rates are called KT-Bills. The government, through the Feds, auction T-Bills every Monday in New York. These bills are auctioned by sealed bid. You may buy a T-Bill for your own trading account if you want to earn percentage (%) on the money in your account. The only disadvantage to this is that most clearing firm's only gives you 90% margin on the T-Bill money. So, if you buy a three (3) month or 90 day T-Bill, you pay \$9,850 for the bill, then in three (3) months, it will be worth \$10,000. So $\$150 \times 4 = \600 or a 6% per annum return. Not recommended because if you lose on your trade, the house will sell your T-Bill to cover.

Orders

It is necessary to understand the logistics of all orders for all the markets. An order has a name and a purpose.

1. A **LIMIT ORDER** – Allows a buy or sell at a specific price. Example: I want to buy one (1) March S & P at \$481.20, or better. Your order will only be filled at that price or better. It works both ways, buy and sell.
2. A **MARKET ORDER** – Simplist, I want to buy one (1) March S&P at the market. (Guaranteed fill, but maybe a price slightly different than the last quote you saw.)
3. A **MARKET IF TOUCHED ORDER** – (MIT) – You would say: Buy one (1) March S&P at \$481.20, your order become a simple Market Order.

The filling of orders doesn't always happen as instantaneously as you would like them to. If the market trades at your price for four times then there is a likelihood of 75% that your order is filled. Sell orders work the same way. It is also **essential** that when you make an order, you always include your stop

requirements in the same order so that the possibility of a major change in the market doesn't catch you napping. It is important to enter the stop orders correctly. The clearing house keeps a tape recording of every call so that there is a record of what is said exactly.

Market Orders are used to enter and exit the market 75% of the time. Limit Order are used 20% of the time. STOP Orders may be used to enter the market, however, it is primarily used to cover your open positions. When you have a trade on in the market, it is called an OPEN POSITION. When you cover that position, you are closing that position. A STOP order will be used to cover your open position and LIMIT your loss. Say you go long for one (1) March S&P at \$482.40. Upon receiving your fill, immediately enter your Stop Order. You would say: I want to **SELL ONE (1) March S&P at \$481.40 ON THE STOP**. So, if the market trades at \$481.40, your Stop Order becomes a Market Order. This stop does not guarantee you a price, but it does guarantee you a fill. The difference between the price that you placed your stop at – say \$481.40, and the actual price you were filled at – say \$481.35, is called slippage. You had a one (1) tick or \$25 of slippage on your stop fill.

As the market moves in the direction that you anticipate, changing your stop to protect your profits is the best course of action. Therefore, you will be entering a:

4. **CANCEL AND REPLACE ORDER** – This cancels your previous stop and sets the new price stop. You are responsible for canceling your stops when you get out of a position. Stops are automatically cancelled at the end of each trading day, unless you state with your order **GTC (Good 'Til Cancelled)**. So you will say: I want to do a Cancel and Replace. I want to cancel my stop of selling one (1) March S & P at \$481.40, and replace that with selling one (1) March S & P at \$482.40. Then – **LISTEN** for the clerk to repeat the order correctly. It does not cost you any money to change your stop orders. At the end of each day, all stop orders will be cleared from the books. All orders will be cancelled at day's end, unless GTC is included when the order is placed.
5. **AN OPEN STOP ORDER** – You may use this order to open a position. If a market has a trend line and you want to stop yourself in it, then you will place an OPEN STOP ORDER. Say the market is trading at 102.90 above your selling price, but you do not want to go into the position unless the market breaks the trend line. So that's why you state **"Sell On The Stop"**. Of course, you may buy on the stop also. It is recommended that you only stop yourself into trades maybe 5% of the time. The most important fact to always keep in mind is that a Stop guarantees you a fill, but not a price. Stops are your most important trading tool. Without them, you are f _ _ _ _ _.

Full Moon Reversal – As a general trend, markets tend to rally into the day that the moon is full. NO, you shouldn't trade on this; however, you should be cognizant of this fact. Traders follow this indicator closely. It is listed on the Market Calendar (see handout). So, a market that rallies strongly into the full moon could be making a top. Example: Yen rallied to 102.16. Watch for the next few days and see. This axiom seems to work best with all contracts except the Bonds.

The news on February 15, 1995 showed that the CPI (Consumer Price Index) was announced to be 3% higher and an inflationary worry caused an initial drop in the Bonds, then the CUF (Capacity Utilization Figure) created a concept of deflation and the Bonds reversed into a bull situation. The Market Calendar list the days when significant news will be announced. All clearing firms will send you a calendar.

Other orders you need to know:

6. **MOC (Market on Close)** This means that in the last 30 seconds of trading, your order will become a market order. It guarantees a fill (but not necessarily a price). This order must be in at least 15 minutes before the close of trading. There is not a Market On Open Order. A simple MO (market Order) will work.

Put a sign up in your office: REMEMBER – ARE ALL YOUR STOPS CANCELLED? Yes ____
No ____.

Always put down the name of the clerk who takes your order and time your ticket number (account # associated with your order) for your permanent record to corroborate with House's tape.

Very Important Tip:

Do not listen to others that show you, demonstrate with back data, or paper trades that their system works. The only person you should pay any attention to is the person that will show you verified account statements, or someone you can sit with over long periods of time and observe.

Today's horror story deals with Bill's \$1,800 computer option program. Yesterday, we related the problems he has with the program and was down \$1,100. So he calls the "expert" who has sold him the program and wanted to get his money back for the program which was supposedly guaranteed. Instead of getting a refund, the "expert" convinces him to put on a new position and before noon, Bill is down another \$7,000. The loss has forced Bill to get a job. Our instructor told him over and over before he made this bad move that the system would not work. Still you must be on guard for all the new and tempting opportunities that come around. You need to have discipline to just say no to would be gurus and computer trading systems. This system was called Delta Neutral.

Another day to watch out for occurs on the full moon. As a general trend, markets tend to rally into the day that the moon is full. No, you should not trade on this day because it is so unpredictable, however, you should be cognizant of this fact. Traders follow the indicator closely. It is listed on the Market Calendar (see Handouts). It is called the **Full Moon Reversal**. This rally could make a top and reverse in the next few days. Watch the markets at the full moon and see. This axiom seems to work with all the markets except the Bonds.

As of February 15, 1995, the news reported of significance was the CPI (Consumer Price Index) which was 3% higher. The initial reaction in the market was – Inflation. The Bonds dropped initially then the CUF (Capacity Utilization Figure) came out that our economy's output was strong giving the market the feeling of deflation and both market reversed into bullish situations.

The patterns on the daily charts have worked well. Look at your handouts for these patterns and compare to the chart work. Trend lines, support and resistance areas, become very important on the daily charts. Also, GAPS play an important role. It is important to keep up daily orders. All trading is based on these charts. It is absolutely imperative to keep five minute and daily charts for all day trading. If you are confident enough to trade overnight, strong daily patterns need to corroborate your thinking.

Scaling needs some explanation. If you see a pattern develop and don't want to put all your money into it, only invest 20% of your capital. If it looks like the trade may take off after another time frame or two, add some more contracts. When then your trade has reached its peak, sell one quarter or half of the

contracts, and move your stop closer and wait a few more minutes. When you think there's no more gain, get out. Scaling can help guarantee keeping part of a gain and staggers the trade.

Reasons for getting out – tuning forks, bear/bull divergence, unfavorable Premium. Bear/bull divergence pertains to the trend of the Bonds vs. S&P 500.

		Time		Start With		
Scaling - \$20,000 Account	- Enter -	75%	--	25%	-30%	-50%
		25%	--	67%	-75%	-100%

Long Term trades are recommended with smaller percentages of capital. Short Term trades use larger amounts of capital. Scaling builds positions over time and reduces over time as well. Market reversals are the time to get out. Scaling helps average as well as balance temptation. There should be sound reasons for every trade. Pattern recognition is absolutely imperative. 5.6

S&P quotations refer to Futures Contracts and there is a cash index that reflects all 500 stocks that are tied to the S&P. The difference is called the Premium. Say the SPH Contracts is \$485.20, and the cash figure is positioned at \$484.45. The difference is .75. **This number is called the Premium.** This number can vary from quarter to quarter. **Usually Premiums between .90 and above are considered bullish. Premiums that are below .60 are considered bearish** and many computerized programs are triggered by this Premium number. When markets roll over from say a March contract to a June contract, the Premium number may be 5.10. When this happens, a readjustment is needed to see where the bull and bear areas are happening and use this to make your trading decisions.

On March 1, 1995, there was news released that the GNP was strong. This news should lend strength to the dollar and put pressure on the bond market. Remember, if the market is looking for weakness in the economy – then lower interest rates will follow. The stock and bond markets always look ahead.

Today, you will notice that the bonds are higher and the S&P's are lower. This is a classic case of Bearish Divergence. It is possibly a good reason to go short in the S&P. S&P follows the bonds 80-90% of the time. When it doesn't, there is trouble ahead for stocks. Watch.

Some Broad generalities –

When the dollar is down and all other currencies are up, if the DM is not, then it must be weak.

When the dollar falls, gold usually rises; a dollar drop is usually inflationary and will cause % rates and gold to go higher. If gold can't rally when the dollar falls, it means it is weak.

When the dollar drops and the bonds drop, S&P should drop.

Economic strength news should make the dollar go up and make bonds drop.

Higher commodity prices means lower bonds, oil, food, copper, etc. The reason – inflation. Good economic news can send stocks and bonds lower because of inflation or it may signal the top of a business cycle.

Stocks and bonds look 12-18 months into the future.

High employment = inflation. Full employment is bad news for bonds – inflation.

On March 6, 1995, we saw the beginning of wild fluctuations in currencies and the fall in the value of the dollar. No specific understanding is available yet because the trends of all the markets are not following perceived logic. Lack of faith in the dollar is the only explanation. No one wants to hold dollars. Benefits to the economy are that tourism may be attractive to foreigners; auto manufacturers products abroad will be more appealing. Foreign autos on the other hand will be more expensive if this situation doesn't reverse shortly. Because we import more than we export, the overall effect is inflationary.

Reading the Currency Numbers

If the Yen is trading at \$108.83, that means that it costs one dollar and eighty-three cents (\$1.83) to buy 100 Japanese Yen.

If the Deutsch Mark is trading at 791.5, then it costs 79.15 cents to buy one Deutsch Mark.

The panic on March 7, 1995 in the currency markets means no one wants to hold dollars. The world is awash in dollars. These currency rallies were the biggest in history. It is unprecedented. The markets, too, are taking a beating. The drop in the dollar may cause the Federal government to raise interest rates. The potential for panic in the market is great. A wait, look, and see mode is appropriate.

Risk Management

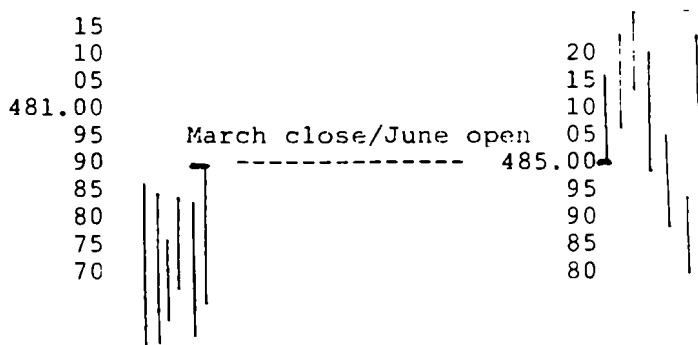
The concept of management becomes increasingly important as success rises. If you lose, you're out quickly. But let's say you start out quickly and experience a gain of 33% in two weeks. What do you do? Usually you keep trading. Greed creeps in. If I was so right, I'll naturally continue to be right. If you aren't extremely careful, that gain turns into a loss within the next two weeks. Therefore, not only do you need a system to use for trading, but you also need a system for managing your money. What we propose in this course is to control our emotions and not let our trading take over our lives. It is recommended that goals be established early so that a steady rate of return on your investment can be maintained over the long run. The biggest problem with sticking to your program is overtrading and trying to second-guess every potential trade. Stick to the strong patterns, but also try to stick to your goals. A 7-8% monthly growth is the rule for managing your account. It's also a good idea to have two accounts, one for trading, and one for running your life. Trading money and income dispersal needs to be kept separate so that your trading account grows, geometrically hopefully. Your analysis of the market is essential and so is your analysis of your financial planning. The goal of earning 7-8% is realistic. Aim for 35 ticks per month per contract. On an initial capitalization of your account, trading only 50% of that margin, you should be able to average this kind of ratio— 5 successful trades out of 8.

What are the costs of setting up? Computer, monitor, printer, modem, software – \$3,000 - \$4,000. Used computers can be obtained cheaper than new and perform well. Minimum power 486. \$600 per month needs to be allocated to pay for the on-line on-time market.

On March 10, 1995, the government released the unemployment figure, which showed that our nation's unemployed was 5.4%. The non-farm increase in jobs was 318,000 people. Good news for the labor force and evidence that the economy was strong. Normally, that should send bonds lower. However, on that date the dollar rallied, the bonds rallied, and so did the S&P. Since the dollar has been the focal point of the markets due to recent pressures, the dollar's recovery has been good news to bull traders. A week earlier, we noted that the stock market was strong. The stocks had a good reason to go down with

the dollar's fall. They didn't. This is a classic case of bullish divergence. Look at how strong the market is again today. Go long and stay long for the time being.

March 13, 1995 marked the beginning of a rollover week. The March contract is no longer the front month. This is an excellent week to take a vacation. The reason being that the market is capable of making large, quick unexpected moves as the big institutions sell out of the March contract and then buy June. Moves of 20 ticks in either direction are quite common. This Friday, the third Friday of the month is execution day. Your clearing firm will advise you (alert) to the fact that a new month is trading. On your computer, you will need to change the future symbol. March=H, June=M, September=U, December=Z. The scale will adjust:



Rollover week is usually very quiet. Your charts will continue, but your scales will be adjusted to meet at the point where March closes and June opens.

System Development

What do you need?

1. The Method = Pattern Recognition = 20%
2. The Management = Goals, 8% per month, limit on trades, stop placement, scaling in and out of positions = 80%

How do you apply the system?

1. Watch and chart the S&P's, Bonds, and Currencies on five (5) minute basis
2. Look for Patterns – Flags, Triangles
3. Use the Scaling to enter and exit positions
4. Limit the number of trades you make (Over a three (3) week period)
 - a) No more than 12 S&P's per month
 - b) No more than 10 Bond trades per month
 - c) No more than 10 Currency trades per month

You need to know what the market is going to give you. Be choosy and picky. Avoid the #1 Problem = Overtrading.

There are reasons for limiting the number of trades. First, trading wears you out, mentally and physically. If you have a number of winning trades you tend to get careless and cocky. This is a dangerous position. If you lose more than 15% of your account in one month, you should stop and bring yourself back into balance. Stop, stop, stop. It is human nature to want to get it back. A good rest will allow you to get a grip on your system and management.

On March 15, 1995, the news in the market centered around PPI (Producer's Price Index), which showed that industrial production has reached 85.7% of capacity. This coupled with wholesale prices increases bode ill for inflation fears. The Bonds started dropping and the S&P followed in the morning, then formed a bull reversal pattern and went up. The strength is indicative of confidence that the economy is strong regardless of the currencies. Coupled with the news that consumer spending is slowing, the fear of inflation reduced.

Today's MESSAGE is to be aware of options. Although not recommended for trading, it is important to be aware of what they are and how they work. First, - an option is a product that gives you the right to own a security or commodity at a certain price. Examples: If you own an IBM March 75 call option, then, you own the right to own 100 shares of IBM 75 at \$75/share on the third Friday of March. Let's say it is January 15th and IBM is trading at 72-1/2, then the March 75 call will probably be selling for 2-1/2, which means \$250.00. So IBM will have to trade for 77-1/2 on the third Friday of March just to break even. If it is higher, you've made a profit. If it is lower you don't have to exercise your option. You are just out \$250.00. **In trading options, time = value.** What a stock or currency or commodity will do in the future is a big guesstimate. But your investment is low compared to the profit you can make. The loss is what you put up. Example: Say the Yen is trading at 111.83. A June 105 "Put" would cost \$600. A June 114 "Call" would cost \$250.00. A Call gives you the option to buy; a Put gives you the option to sell.

Example: Say someone has 200 shares of GM at 38/share; it would be listed in the financial section -

June 25	-	15	
30	-	10	you could sell 2/100 share blocks.
35	-	5	you would tell your broker - sell June
40	-	2	GM 40 calls at 2. If GM goes from 38-43
45	-	1	your stock could be called away. You would make \$2 on the option and \$2 on the deal. You don't make the last \$1 because the deal was called.

You would have missed out on \$1 of profit on the prices, but you would have locked in a price for a profit of 4 points total, which is better than 10% gain for that short period of time. Market timing skills are essential to determine when options should be exercised.

Covered Call Writing

Say you own 100 shares of IBM. You can gain by selling the call option against your 100 shares of IBM and pocket an extra \$300 if the call sells for \$3. If the stock doesn't go up, you keep the \$3 x 100. If it stays the same, you've made a little. If it goes down, you have hedged your loss. The reverse, buying the Call for \$3 x 100 can be profitable if the stock goes up. But you have to be prepared to pay for your shares when you exercise the Call. Again, if it goes down, you don't exercise the Call and you just lose the \$3 x 100.

Margin Accounts

Pick a stock selling for 30-40/share. $200 \times 30 = \$6,000$ divided by 2 = \$3,000

Option	-	400
		\$ 2,600 Net to Control 200 shares

How to Raise Capital

Show plan and system. Show patterns and system (money management and pattern recognition.) performs. Explain why 90% of people trading futures lose – because they usually have no plan or system. Trading is difficult, so disclose past results. Do not guarantee future performances. Raise \$15K, Scale in up to \$50K.

It would be prudent to explain to any investor that it may take some time for your system to work its way to fruition. A next egg of \$50,000 would be ideal, but you wouldn't want to lose all of that money right off the bat. You would surely lose that person's confidence and never get him back. So, if you start out with only \$15K of his money and you lose that, he might still be willing to continue. If you are successful initially, then he may be willing to scale into a larger cash position. Again, open disclosure of everything that you do with his money is the best policy.

A scenario for working with someone else's money would be to offer to split all the profits, after expenses – quotes, set-up costs, a small salary. What you would pitch would be to turn his \$50,000 into \$500,000 in four (4) years. If it looks like you are going to do this and he gets greedy, you can adjust your take downward. A good contract between parties is recommended, and make sure that legal counsel approves.

When you have time, play with some numbers and make a nice chart that shows how your investment capital can grow if you keep your management in line and shoot for the goal of 7-8% monthly growth. Start with \$15,000 and add 8% to that each month. In five (5) years, you should have around \$900,000. About 45% will come out of that for taxes and expenses leaving around \$500,000. This works out to be 29 ticks of net gains per month based on utilizing at least 55 of the total margin in the account. Careful monitoring will limit losses and riding winners will help to offset losses.

It is important to understand and explain that you are entering a business venture. There are risks and no guarantees. Spell it all out. Money can be made or lost.

How to Lose Money in the Futures Markets

Your first problem will be "Over Trading"

2nd – Listening to another opinion

3rd – Buying a computer system for any kind of trading

4th – Trying to pay your bills from your trading account

5th – Trying to impress a client with a quick gain

6th – Trying to pay for a new car from your market account

7th – Getting stuck in a train of thought, such as "the Yen has to go lower

Because it is at an all time high

8th – Trading because you don't have anything better to do.

9th – Over leveraging, trading the DIP (Dino's Investment Plan) system. Not scaling in and out of the market

10th – Trading while having emotional problems with kids, wife, friends, or even clients

The accompanying handout entitled “Reminiscences of A Stock Operator” provides some insightful quotations from the experiences of a trader who took the time to lay out the pitfalls he experienced over the years, and who managed to finally get himself centered into a good trading system with self discipline. Incorporating these ideas into your trading consciousness will hopefully steer you away from making these same errors. Often it is difficult to learn without going through these kinds of mistakes. Those who can will be years ahead of the competition.

Necessary Tools

To enable accurate tracking of the markets several companies sell software to outfit home offices: CQG, Futures Sources, and Reuters. Enclosed handout for CQG for Windows shows prices for available services as well as minimum computing power needs. For an expanded system, a TRADE STATION program is necessary, like multiple screens.

Clients

If you are considering using other people’s money, you need to maintain good clients. A bad client can drag you down and then blame you for the loss. A good client must be educated and trained by you. You need to be up front and honest. Making money cannot be guaranteed. It must be understood explicitly that you may lose before you win. In painting your picture of how rosy the profits can be, it is probably a better idea to down size and shoot for percentages that are better than existing money manager’s records, but much less than you really anticipate earning. So when you perform well, no one’s expectations are blown. Saying you can make 2-3% (per month) will catch people’s attention. Your plan must be clear and defined. Overselling yourself can only lead to future difficulties. Small gains are more realistic. If you have a license, you can solicit funds. If you don’t, you must obtain disclosure that states your relationship began by referral and that you did not initiate any form of solicitation. The overall idea is to get a client and keep him forever. Building a book or client basis is the terminology of the trade. Starting slowly, establishing a good track record and in the process, a good reputation will generate greater amounts of trust and financial backing. Make sure no one gives you money to invest that is borrowed, because this just creates unneeded pressures. Take what you have learned and use this knowledge wisely.

TRAINING COURSE MANUAL

WHAT IS TECHNICAL ANALYSIS?

The definition of Technical Analysis has three parts. Technical analysis is: 1. the study of market action; 2. through the use of charts and technical indicators; and 3. for the purpose of forecasting future price trends.

“Market Action” is a broad term and is generally used to cover all three aspects of the market: price, volume, and open interest. It is enough to just mention them here because they will be discussed in detail later in the course.

The main use of technical analysis should be to try and predict future market price movements of stock and commodity markets. Unfortunately, it is used too often to just describe where the market has been and that doesn't have a lot of value. The real value of technical analysis becomes evident when you can use it to predict the future and make money in the market.

TRAINING COURSE MANUAL

BASIC PREMISES OF TECHNICAL ANALYSIS

There are really three premises upon which technical analysis is based:

1. Market action discounts everything.

This means that the market takes everything into account in setting the price of a stock or a commodity. Every generally known piece of information that can possibly affect the market price of a stock or commodity futures contract is reflected in the price. That information includes fundamental things like earnings, changes in supply or demand, political events, and economic factors. The information would also include psychological things such as the mood of consumers, worries about disturbances in other countries, political factors, etc.

2. Prices move in trends.

This means that once prices start moving in a direction – up, down or sideways – they will continue to move in that direction until something happens to change it. A corollary to this premise is that a trend in motion is more likely to continue than to reverse. This sounds a bit like Newton's first law of motion!

The whole purpose of preparing charts and calculating technical indicators is to try and identify trends in the early stages of their development and then to trade in the direction of the trend until the charts and indicators begin to show signs that the trend is reversing. The major objective of technical analysis is to predict the change in the direction of the trend as early as possible so that you can trade accordingly.

3. History repeats itself.

This means that over time people tend to behave in the same way. That is, they react to a set of conditions in the same way each time those conditions reoccur. The job of the technical analyst is to chart past price action to determine if certain events were followed by certain results and then use that information to try and predict future actions.

For example, over the years certain chart patterns and levels of indicators have been identified as revealing the psychology of the market. Since over and over again those conditions seemed to precede certain results, it is assumed that the

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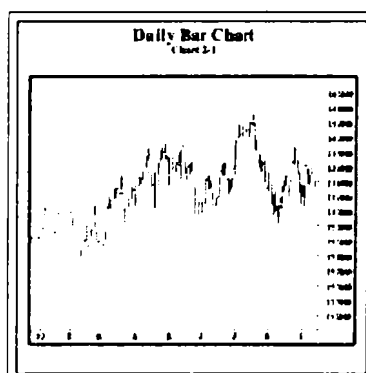
same conditions today should predict the same result again. If that data accurately reflected the future before, why shouldn't it continue to do so today. After all human behavior (i.e. greed, fear, etc.) remains very consistent over the years.

TRAINING COURSE MANUAL

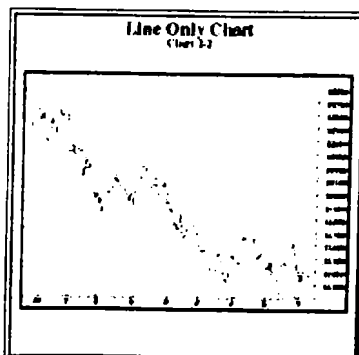
TYPES OF CHARTS

In order to better see how the price of a stock or commodity, prices are posted on charts. There are three basic types of price charts.

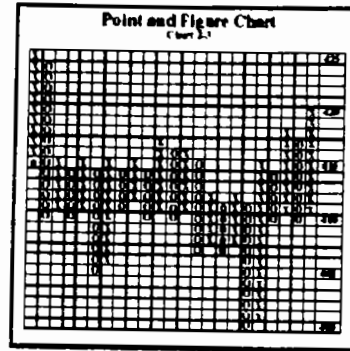
The Daily Bar Chart is the most widely used type of chart in both stock and commodity futures trading. On this type of chart the daily price action is shown by a vertical bar. The top of the bar is the day's high, the bottom of the bar is the day's low and the tick mark on the right side is the closing price. Sometimes the opening price will also be shown as a tick on the left side. There is one bar for each trading day.



The Line Chart is used less often and shows only the closing price. Because of this it has much less value and is generally used just to see long-range trading patterns.



The Point and Figure Chart is generally used for intra-day trading because it shows short-term price moves more clearly. The chart is made of x's and o's; the x's mean the price is rising and the o's mean the price is falling. Each new column indicates that the price has reversed direction. The construction and use of this type of chart will be covered later in this chapter.



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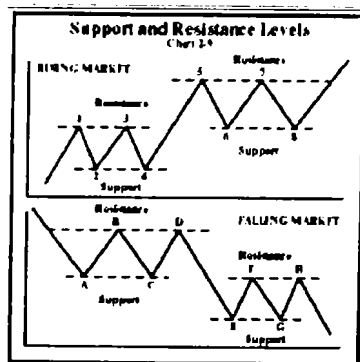
SUPPORT AND RESISTANCE LEVELS

The basic tool for analyzing a chart is the use of support and resistance levels (S/R levels). First, however, it is important to know what is meant by S/R levels. Chart 2-9 shows major lows and highs acting as S/R levels; in a rising market in 2-9A and in a falling market in 2-9B.

A support level is a price on the chart below the current market level at which a decline in prices is usually halted and prices turn back up. This is a price level where sellers suddenly become wary, buying interest takes over and prices begin to rise.

A resistance level is a price on the chart above the current market level, at which a rise in prices is usually halted and prices turn back down. This is a price level where buyers suddenly become wary, selling interest takes over and prices begin to fall.

Both support and resistance levels can occur in either rising or falling markets.

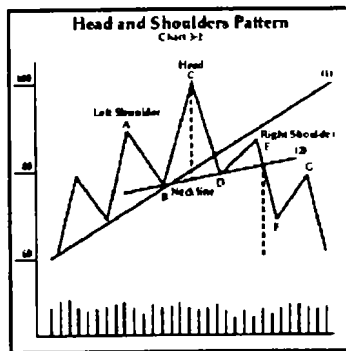


TRAINING COURSE MANUAL

REVERSAL PATTERNS – HEAD AND SHOULDERS

Probably the best known reversal pattern is the head and shoulders. A typical formation is shown in Chart 3-2. Volume is shown at the bottom of the chart. The higher the bar, the greater the volume.

As the price moves up on its way up to Point A, the uptrend marked as (1) is proceeding normally with no sign of a top. Volume expands as the prices move to new highs which is normal. From the peak at A, there is a corrective dip to the support level at the trend line at Point B on lighter volume. This is also normal. The rally back up to a higher peak at C is also normal in an uptrend. But now prices fall to Point D and in doing so, they penetrate support at the trend line. The break below an important support level is often the first warning that something is happening.



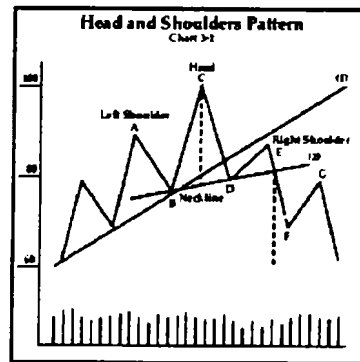
Now the market rallies to Point E but isn't able to reach the previous peak at C. This type of rally will often retrace 1/2 to 2/3 of the previous decline. On this chart, this is from C to D. To continue an uptrend, recall that each high point must exceed the high point of the rally preceding it. And, since the rally didn't get up to price level C, the uptrend is faltering.

However, in spite of the warning signs, i.e., a lower peak at E and a penetration of the trend line at D, we still only know that the trend has shifted from up to sideways. This

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might been enough to justify liquidating long positions, but is not necessarily enough to justify new short sales.

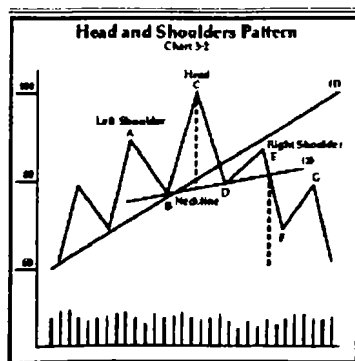
Based on the pattern so far, we can now construct a new and flatter trend line (2) through B and D. If the pattern actually turns out to be a head and shoulders pattern, this line will be called the "neckline." A neckline in an uptrend will usually have a slight upward slope but that is not critical.



The final and deciding factor in the formation of a head and shoulders pattern is if the price now closes below the neckline, which it does in this example by falling to Point F. It is important that this move through the neckline be confirmed by an increase in volume, as it is in this example. At this point there is often a bounce back up (to G in this example) but it is usually short lived and prices continue lower.

While it is helpful to know that the trend has reversed, we also want to know how far the reversal will go. The way to do this is to measure the vertical distance from the head © to the neckline. On Chart 3-2 that is from 1000 down to 80 or 20 points. Now measure the same vertical distance down from where the price line crossed the neckline. On this chart it is from the neckline crossing at about 82 down 20 points to 62. This should be the approximate price at which the trend will again reverse and turn to the upside.

A head and shoulders pattern can also appear as a bottom reversal pattern. When this occurs it is called an inverse head and shoulders. It is a mirror image of the topping pattern in all respects.



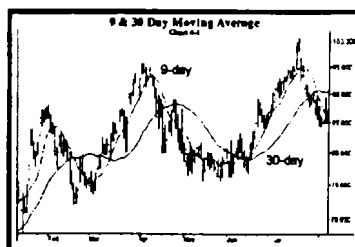
TRAINING COURSE MANUAL

MOVING AVERAGES

A moving average is the average of the previous n-day number of closes. For example, a 9-day simple moving average (MA) is the average of the closing prices for the last 9 days. In calculating the MA each day, the earliest day is dropped and the latest day is added to the others being averaged. Thus the 9-day period being averaged moves forward one day each day.

The effect of a moving average is to slow down the price movement so that the longer-term trend becomes smoother (or less volatile) and therefore more obvious. The longer the period of the moving average, the smoother the price movement is.

Chart 4-1 shows two moving averages, a 9-day and a 30-day, overlaid on a daily bar chart of Microsoft. Notice how the longer-term 30-day average changes at a slower rate and therefore smoothes the price action to a greater extent. The choice of a moving average depends on the trader's time frame for holding trades. Day traders, for example would use short-term moving averages and position traders would use longer-term moving averages.



TRAINING COURSE MANUAL

VOLUME

In the stock market, the volume figures published by the NYSE and the NASDAQ at the close of trading include only the shares traded during that session. However, the next morning, the NASDAQ website publishes a volume figure that also includes the after-hours trading volume of the NASDAQ listed securities.

In the futures market, volume is the total number of futures contracts traded during the entire trading day including the day, night and Globex sessions. Official volume futures for futures contracts are not available until the next day but estimated figures are available a short time after the markets close.

Volume can be used in two ways: (1) as a measure of the strength of a market trend, and (2) as a confirmation of price patterns.

- (1) Volume used a measure of the intensity or urgency behind a price move. - - The general rule is that volume should increase in the direction of the existing price trend to confirm that trend. In an uptrend, for example, volume should increase as the price moves up and volume should decrease as the price moves down during corrections. In a downtrend, volume should increase on the downmoves and decrease during the corrective upmoves. These volume levels indicate that the current trend has strength and is likely to continue. If volumes are different then these, then a volume divergence is occurring and a change in the trend may be imminent.
- (2) Volume used a way to confirm a price pattern – In the Head & Shoulders pattern, for example, it is important that volume is light during the formation of the left shoulder and even lighter during the formation of the head. Volume should then be heavier on the subsequent down move from the right shoulder through the neckline. Another example is that on Double and Triple Top patterns, it is important that there is lighter volume on the successive peaks with heavier volume on the downward moves. Triangle patterns are usually formed on lighter volume with heavier volume on the breakout from the pattern. In general, it is important to look for heavier volume on a breakout from chart patterns, trendlines and congestion.

TRAINING COURSE MANUAL

INTRODUCTION TO TRADING SYSTEM DEVELOPMENT

Trading system development for the purposes of this course is the process of designing a ***mechanical*** method of trading the markets using a rule-based system for entry and exit. Mechanical systems differ from ***discretionary*** systems in that while a discretionary system also uses rules, it has the added flexibility of determining entry and exit points based on gut feelings and intuition. The goal of a mechanical system, on the other hand, is to use indicators and a trading method that is strictly applied without question. There is no place for discretion in a mechanical, rule-based trading system.

TRAINING COURSE MANUAL

DEVELOPING THE TRADING SYSTEM

The actual development of a trading system begins with choosing a trading concept. To do this the trader must first develop a trading philosophy through observation of the markets. Then the trader has to test and choose the indicators that seem to do the best job of generating profits from those observations.

For example, a trader may observe that share prices are beginning to trend higher and decides that the most advantageous strategy for now is to trade in the direction of the trend. Therefore, he decides to develop a moving average crossover system to capture that trend situation. Entry and exit criteria must also be established. The moving average crossover indicator would then be developed and tested on a historical data set with the aid of computer software.

The computer software will be able to determine how successful the system would have been over some past period of time. The software will tabulate entries and exits, the profit/loss profile, the number of trades, the drawdown of the account and other information. The next step is to try some other moving averages and other entry and exit points to see if they would have been even more successful.

Once you are satisfied with the results using one set of historical data, it is important to test the system on a second set of data called the test period. A test period is a slice of data from the initial data used to develop the trading system that is set aside for later use. Once the trading system is fully developed and the parameters are set, the test period is used to measure how the trading system will perform under actual market conditions. It should be noted that a statistical rule from sampling theory holds that the test period must generate a sample of at least 30 trades in order to be statistically significant. It is also desirable to have the test period contain as many different types of overall market conditions as possible. The test period should contain a variety of up, down, and sideways markets.

TRAINING COURSE MANUAL

INVESTING VERSUS TRADING

When we are talking about stocks and commodities, it is important to differentiate between trading and investing and to realize the separate risks involved with each endeavor. Investing is the act of seeking opportunities and taking a position for the long-term, sometimes even years and usually from the long side. Trading on the other hand, is the exercise of taking positions that may only last for minutes or hours and rarely for more than several weeks. Investors typically seek a certain degree of safety in principal and a satisfactory rate of return including income and price appreciation. Traders rarely seek income, such as dividends or coupon payments, and instead concentrate on price movement, up or down.

Entry points do not need to be as exquisitely timed for the investor who may be willing and able to sit through a sharp reduction in principal in the hopes of future gains. Trading, however, is usually a highly leveraged act where timing, entry and exit points are extremely important. Traders rarely have the luxury of hanging on to a trade through a significant drawdown. An investor, for example, convinced that Philip Morris is a good investment, may be willing to sit out a 25% or 30% downmove in an unleveraged stock position if he is convinced that he is right, particularly if he is enjoying an income stream from dividends. The investor may be prepared to wait years to be proven correct. But a hypothetical 30% drop in a single bond futures contract priced at 113-00 would result in a loss approaching \$34,000, almost thirteen times the amount of initial margin placed on the trade.

TRAINING COURSE MANUAL

MONEY MANAGEMENT – HOW MUCH TO ALLOCATE PER TRADE

Rule number one is to commit only 10% of the funds to a single market for margin deposits, in the case of a \$20,000 account, that would be \$2,000. This protects the trader from placing so much of his account in a single position that an adverse move would wipe him out or cause too large of a drawdown. This excludes the trader with a \$20,000 account from several markets where margins on a single contract are prohibitively high. In November of 2000, for example the initial margin on a single S&P 500 futures contract was \$23,438, more than 11-times the amount of money available for margin using the 10% rule. In fact, a \$2,000 commitment makes trading any full size stock index futures contracts impossible as well as various financial, metals and energy contracts. There are, however, still plenty of diverse futures contracts available for the speculator with a \$20,000 account. The stock trader has much wider latitude in picking specific stocks to trade but still must stick to firm money management rules.

TRAINING COURSE MANUAL

HOW MUCH TO RISK ON EACH TRADE

So the trader has \$2,000 to commit to each position but how much should he risk on each trade. A general guideline is to limit the risk to a maximum of 5% of the money that is held in the trading account. Even that is high and a more conservative number would be 2% or 3%. The amount to place at risk is measured as the entry point less the protective stop. If the trader has a \$20,000 account, he will allow himself to lose no more than \$1,000 on a trade. For example, that would be a one point adverse move in the US Treasury bond futures market or a \$1.00 move in the NYMEX crude oil contract.

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TRAINING COURSE MANUAL

"TRADING STRATEGIES 101" – SAMPLE QUIZ

-
1. The belief that market action discounts everything is a basic premise of Technical Analysis

☐ True

☐ False

-
2. A support point is a price level the current market where buying interest should be able to overcome selling pressure.

a. ☐ Above

b. ☐ Below

-
3. A Head and Shoulders topping pattern is confirmed when the price closes below the neckline on heavier volume.

☐ True

☐ False

-
4. High volume in an uptrend is an indication that the market is.....

a. ☐ Strong

b. ☐ Weak

-
5. Check which of the following statements are true (Check all that apply)

- a. ☐ Traders typically use a higher amount of leverage than investors.
- b. ☐ Traders seek a stream of income from positions they take
- c. ☐ Investors seek safety of principal and a satisfactory rate of return.
- d. ☐ A trader's entry and exit points must be better timed than the investors.

-
6. What is the maximum amount of account equity that a trader should risk on each position?

- a. ☐ 20%
- b. ☐ 5%
- c. ☐ 10%
- d. ☐ 2%

TRAINING COURSE MANUAL

TRADING SYSTEM TIPS AND TOOLS

(An article by Jake Bernstein, President of MGB Commodity Advisors)

These suggestions for trading come from the voice of experience. Take this advice and you may not have to learn these lessons the hard way.

My more than 24 years of research and trading in futures have revealed one important thing above all else: The most simple trading systems often work best.

Yes, I know all about the claims and the hypothetical performance records. I know all about optimized and black box systems and the virtues of artificial intelligence. But I keep coming back to the same conclusion as a result of my research: simple systems work best. They are easier to understand, implement and test. Once you have experienced profits using a simple method, you can experiment with complex systems and decide for yourself. Here are other truisms I've found.

Be independent, isolate yourself, remain pure. The trader's mind is a delicate machine. It is easily affected by the many inputs that impinge on the decision-making process daily. The futures market thrives on opinions, mass psychology, emotion, news and rumors. The less you hear, the better off you'll be. Your opinions are just as good as those of the next trader, and your systems, once tested, are as good as the next. Most systems are correct much less than 50% of the time and no more than 65% of the time; however, even this 15% margin above chance occurrence is not a large margin of safety. By allowing the input of others to affect you, this margin may be neutralized and you will lose your advantage. The ability to see the markets clearly is a great asset. **The more you allow other opinions to influence you, the more you'll be like the rest of the trading world. You will not be in good company.**

Don't read the market news. If you subscribe to one of the two daily financial papers, do so for technical data only. The news report and opinions of the reporting staff are poison unless you can train yourself to do the opposite of what the majority recommends.

Don't get more than two advisory services. Actually, you're better off with one or none. If you get one service, follow it as closely as you can. Don't pick and choose from its recommendations. Follow all recommendations or follow none. Most traders pick and choose wrong.

Use a discount broker. Unless you do business with a broker who also is your advisor, use a discount broker who will not bother you with opinions or pressure you with trading ideas. If you decide on a broker who also will advise you, make sure it is one with considerable experience

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who is not in business for the simple purpose of generating commissions. Although difficult to find, such brokers exist.

Don't discuss your trades with anyone. Discussing your trades, signal, methods or indicators with other traders only infects them with your ideas and you with theirs. Confusion will be the end result.

Don't discuss the markets with friends. In stating your opinions, you will reinforce them to yourself, and you will be inclined to hold onto them in spite of what your system may say. A good trader will not express too many opinions, but will focus on actions, position and signals instead.

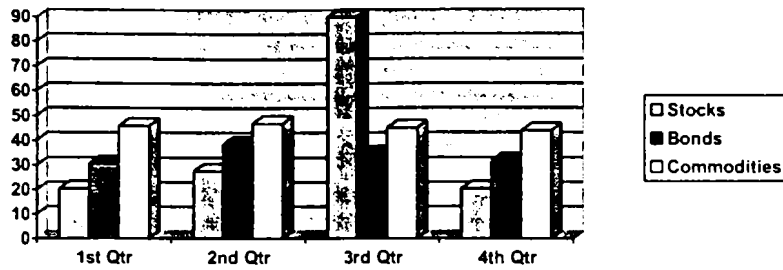
Begin with sufficient capital, trade small positions and diversify your trading. Attempt to spread your risk over several different markets. Avoid the lure of large positions. The need to trade large positions stems from ego and feelings of inadequacy. Many people need to compensate for negative self-concepts by asserting their power in the markets. They attempt to prove their machismo by being aggressive, trading large positions, taking chances, and asserting their independence. You will be better off beginning as a small fish in a big pond who seeks small reliable market moves as opposed to large, unreliable moves. Size can create problems. The larger your position, the more difficult it will be to enter and exit trades with confidentiality and at good price fills. It's not the size of your position that's important, but how you trade your position that will make you a winner or a loser. Once you have learned how to trade, you can tackle the problems that come with large positions.

Change your perception of the market. That's easier said than done. All organisms are captives of their perceptions. If you see the market as an adversary, you will approach it as a soldier approaches combat. But if you see the market as a vehicle that you must learn to operate, you will learn how to do so to your advantage. This does not mean the markets are so predictable that your attitude will shape the way you trade. But is easier to go with the flow of the market than it is to fight the trend.

Do your homework. If you have settled on a particular trading system or method, be dedicated to keeping your work up-to-date. When you've taken a few losses, you'll be tempted to abandon your system. Then, when your work is out-of-date, you may realize that you've missed the start of the move and it's too late to get in.

Be prepared for numerous consecutive losses. One of the most frustrating, anxiety-provoking things a trader can experience is a string of numerous consecutive losses. These are the most difficult times for futures traders. They cause errors, inconsistency, lack of discipline in the search for new systems. If you are prepared for the worst before it happens, you will be able to cope with it when it does. And, believe me, it will!

TRAINING COURSE MANUAL



TRADING TECHNIQUES

Futures trading often is depicted as a rich man's game. A flood of institutional money combined with a historic rise in volatility over the past decade and a half effectively squeezed out many smaller scale speculators, leaving a perception that few opportunities remain for the off-floor commodities trader who does not have Paul Tudor Jones size pockets.

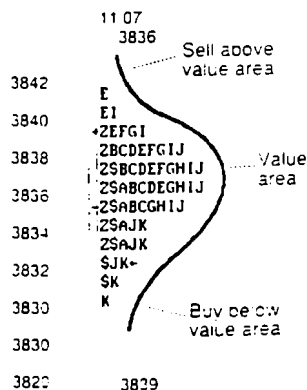
Fortunately, this is not true. While futures trading certainly is not a game for the uninformed or under-financed. There still are ways for the smaller or more conservative trader to participate in the markets.

One way is through day-trading. Although it has inherent qualities that attract naturally cautious traders, day-trading is not reserved exclusively for the small fry. Many large traders and money managers who handle millions of dollars are drawn to the "clean slate" aspect of day-trading as well.

The Upside. The benefit of day-trading can be summed up with one word: Control. The name of the game in futures trading is risk control, and day-trading provides one of the best methods for limiting market exposure by allowing you to sidestep two potential obstacles: heavy margins and overnight risk.

This days profile exhibits the common bell-shaped curve of the "normal day" profile. The value area represents the range that price keeps returning to.

Profile of a market



Margin rates initially are set by exchanges. Clearing firms generally margin customers at a rate in line with the exchange figures – sometimes more, but never less, because the firms themselves are margined by the exchange. (Rates range from less than \$100 per contract to over \$20,000 for contracts like the S&P 500). If a market moves against a trader, the clearing firm may issue a margin call, instructing the trader to deposit more margin money into his account to cover potential losses.

This is where day-trading comes in. If you only trade on an intraday basis, offsetting all positions by the close, you will avoid expensive margins that might otherwise prevent you from trading. If you have \$7,500 in your trading account, you can buy and sell an S&P 500 contract during one trading session and take your profit (or loss). If you wanted to hold an S&P 500 position over a number of days or weeks, you would have to have at least the minimum margin requirement (approximately \$12,000 per contract in November) in your account at all times. If you didn't, you might have to come up with more margin money immediately or risk having your position liquidated.

Intraday trading also protects you from the adverse effects of events that occur while the markets are closed, resulting in large gap openings. Although some electronic overnight makes now exist, the 24-hour global trading village still is a long way from reality, and you have no control over world events that may turn a market against you while you sleep, whether it's a government affecting your currency position, a war affecting your oil position, or a monsoon affecting your rice position.

The Catch. The other half of the equation, as you might expect, is that day-trading limits your options in other ways; it shuts certain doors, while it opens others. The day-trader must adjust profit objectives to the shortened time horizon.

Day-trading rarely will give you the big trade you've been waiting for your whole life, but on the other hand, you might sleep better at night without having to worry about the market opening 10 points against you in the morning. Every day starts with a clean slate. In football terms, day-trading might be considered the grind-it-out ground game versus the flashy passing game. Ball control versus big play. You give up throwing the bomb, but at the same time remove the change of the devastating interception.

Laying The Foundation. Most technical analysis that can be applied to monthly, weekly or daily data will work on an intraday scale, at least to an extent. Indicators that are too noise-sensitive or have a tendency to lag the market, like some momentum studies, might give a distorted view of a market when used on their own, so use confirming indicators.

It's also important not to trade in a vacuum: Don't treat each day as an independent entity: look at the longer-term picture to determine if you're operating in a larger uptrend or downtrend, etc., so you have a better idea of what to expect.

You also must focus on contracts with enough liquidity to get good fills and enough volatility for decent size price moves. Thinly traded contracts with narrow ranges can be exercises in futility and frustration.

Opening Bell. One decision every day-trader has to make is whether or not to trade on the opening. Many on and off-floor day-traders establish positions on the opening for two

reasons. First, the open usually is a heavy volume period, and more liquidity means better fills. Second, the open usually is one of the most volatile periods, as the market seeks to establish a trend or stable price level.

The opening often will introduce a short-term trend that may either indicate the trend for the day, or actually be a false signal, in which case, the day-trader can “fade” the early trend, that is, buy or sell against it in the hope of a reversal.

Day-trader, author and system designer George Angell lectures on day-trading the S&P 500, and offers food for thought: One extreme of the day’s range is usually contained in the first 30 minutes of trading.

Mind The Gap. Every trader has heard something along the lines of “gaps were meant to be filled.” Like many old sayings, this one has more than a kernel of truth in it. Markets often exhibit a stronger tendency to fill price gaps. The gap functions like a magnet, drawing prices back before they can take off again.

If you look at an intraday bar chart, you will notice that on gap openings, the market often trades away from the gap for the first few minutes, then quickly reverses and “fills” the gap. For example, a market that gaps lower may initially trade lower, leading everyone to believe that a downtrend is in effect. After five minutes, however, the price shoots to the upside, closes the gap and reverses again, trading lower on the day. This scenario presents two options: you could buy the opening and then sell when the market rises back to the gap; or sell as the price fills the gap, expecting the downtrend to resume (see chart, “Filling the Gap”). If the opening gap is not filled within five or ten minutes, there is a strong possibility the early trend may be the dominant trend of the day.



The market gaps lower on the opening, but soon rises to fill the gap. Traders had the opportunity to buy the opening and sell as the market rose to fill the gap, or sell the gap and wait for the downtrend to resume.

One advantage to trading the opening: If you hit the market correctly, you can take your profits and go home early. If you're wrong, you still have the rest of the day to look for trading opportunities. But the characteristics of the opening period (high volatility and

liquidity) that make it such a potentially lucrative time to trade, also make it risky. Unfortunately, day-traders do not have a surplus of time to design strategies and make decisions – the average exchange trading session last six hours.

John Hill Sr. presents the flip side of this coin, a trader, CTA and publisher of **Futures Truth** newsletter. He thinks the early morning gives too many “false signals.” He suggests waiting for the second or third hour of trading to put on positions because the primary trend for the day often establishes itself at that time. This method allows a trader to avoid the uncertainty of trading volatile openings.

Market Profile. Another popular technique for gaining insight into intraday price action is the Market Profile, a method designed by J. Peter Steidlmayer and developed in cooperation with the Chicago Board of Trade. In “Profile Of A Market” (shown on page 1), the letter designation of each time bracket is placed next to every price that traded within that time bracket. The resulting “profile” shows the distribution of prices over the trading day.

The main idea behind Market Profile is that market profiles have three basic variations: the normal day profile, the trending day profile and the non-trending day profile. The idealized normal day profile has the familiar bell-shaped curve distribution of data, with most of the trading falling into the fatter middle range (the “value area”), with a smaller amount of activity at the extremes of the days range (70% of profiles fall into this category). In the trending day, the value area will appear at one end of the range. Non-trending days do not exhibit a predominant value area.

When a trader sees a normal day profile forming, for example, he can sell when price moves above the value area, and buy when price dips below it. Market Profile is useful in determining the perceived value of a market on a given day, and gives the day-trader a method to evaluating the trading landscape he is in.

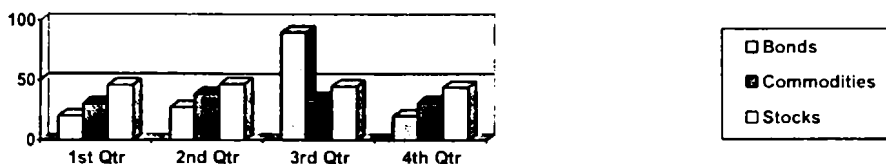
Another idea is to look at inter-market relationships. Floor traders especially look at tick-by-tick movements in cash and correlated markets, buying or selling when they feel price is out of line with these barometers. The influence of each tick in the T-bonds on the S&P 500 futures pit cannot be overestimated, for example.

Risk control, money management principles and common-sense trading are just as important for day-traders as they are for large position traders. Take your losses, don't average trades, don't add on to losers and don't overtrade. Just because you're a day-trader doesn't mean you have to trade “every day.” Wait for good opportunities, tomorrow's another day.

Pivot Profits

William Greenspan is a day-trader who practices what he preaches. In addition to trading, he runs a day-trading strategy school called “Commodity Traders Boot Camp, Inc.” in Chicago. One of his cardinal rules: Make 10 points in a million trades – not a million points on 10 trades. One method he uses successfully is called the pivot technique.

The pivot technique involves trading with support and resistance levels derived from the previous day's high and low closing prices. The idea is to sell when the price pivots these levels in a break and buy when price pushes through them on the upside.

TRAINING COURSE MANUALTRADING TERMS

Ascending Triangle: A right triangle formed by a flat top and an up-sloping bottom boundary. Prices tend to break to the top, or flat side of an ascending triangle. To project an upside price target, measure the widest part of the triangle and add it to the apex of the triangle in the direction of the breakout.

Backtesting: The practice of applying tools or trading systems to historical price data to help determine the tools' potential accuracy on current and future price data.

Bar Chart: A chart that graphs the high, low and settlement prices for a specific trading session over a given period of time.

Bear: One who believes prices will move lower (opposite of bull).

Bearish Divergence: Situation that occurs when a new high posted in the underlying futures price is not accompanied by a corresponding high in a technical indicator (such as stochastics, RSI, etc.).

Breakaway Gap: A gap in the price line that occurs when prices break above (or below) key resistance (or support) lines. Usually signals the beginning of a significant price move.

Breakout: A price advance (or decline) that "breaks through" an established price barrier. For example, resistance, support, trendlines, trading ranges, etc.

Bull: One who believes prices will move higher (opposite of bear).

Bullish Divergence: Situation that occurs when a new low posted in the underlying futures price is not accompanied by a corresponding low in a technical indicator (such as stochastics, RSI, etc.).

Day Trade: When the purchase and sale of a futures contract occur on the same day.

Delta: An algebraic term meaning "rate of change." The amount by which an option's price will change for a corresponding change in price of the underlying future.

Derivative Instrument or Product: (Wide Range of Meaning) (1) A contract or convertible security that changes in value in concert with and/or obtains much of its value from price movements in a related or underlying security, futures or other instrument or index. (2) A security or contract, such as an option, forward, swap, warrant or a debt instrument with one or more options, forwards, swaps or warrants embedded in it or attached to it. The value of the instrument is determined in whole or in part by the price of one or more underlying instruments or markets.

Descending Triangle: A right triangle formed by a flat bottom or down sloping upper boundary. Prices tend to break to the bottom, or flat side of the descending triangle. To project a downside price target, measure the widest part of the triangle and add it to the apex of the triangle in the direction of the breakout.

Down Channel: Two parallel lines identifying resistance and support, confining prices as they move lower.

Drawdown: The amount of money that is lost before a trading system begins making money again. Often a measure of a system's success.

Equity Spike: Any trade or trades that produce more than 10% of a trading system's total profits for more than 50 profitable trades; manifested as an unusual price jump due to an unforeseen force.

Exhaustion Gap: A gap in the price line that occurs near the end of a trending move. Usually associated with rapid and extensive price declines (or advances), and occurs during periods of high volume. If an exhaustion gap is filled within a short period of time, the end of trending move is confirmed.

Flag Formation: Describes price action in a bull or bear trending market that looks like a flat flying from a flagpole; gives objectives for the next move. (Measure the flagpole and add it to the breakout point of the formation.)

Fundamental Analysis: A study of market behavior that stresses underlying facts for supply and demand of a particular commodity in the belief that such analysis will enable one to profit from being able to anticipate price trends.

Gap: An empty spot formed when price lines don't overlap the previous day's price action; indicates a powerful force in price action. Once a gap is filled, it is no longer significant (see breakaway gap, exhaustion gap and measuring gap).

Head and Shoulders: One of the most reliable chart patterns; consists of a left shoulder, neckline, and a right shoulder (can be inverted). Price objective is found by adding the distance between the head and neckline to the neckline.

Hedge: An action that reduces risk, usually at the expense of potential reward. Hedging is typically accomplished by making approximately offsetting transactions that will largely eliminate one or more types of risk. In the narrower sense, the term often indicates partially offsetting a long position in one security with a short or short equivalent position in a related security.

Lagging Indicators: A tool that follows price direction. Can be used to smooth market action and confirm the overall trend. Examples include stochastics, moving averages, Relative Strength Index, volume, advanced decline line. Tells when you've been.

Leading Indicators: A tool that anticipates market movement or a change in market direction. Examples include the DMI and momentum. S&P Premium and Bonds lead indicate S&P.

Long: (1) One who has bought a futures or options contract to establish a market position.

Measuring Gap: A break in the price line that usually occurs during the middle of a price move, used to measure the potential target of the current trending move. To find that objective, measure the distance from the birth of the trend to the bottom of the gap, and add that distance to the top of the measuring gap (in an uptrend).

Momentum: Measures the differences in prices between two time intervals. Signals occur when the indicator diverges from prices. Acts as a leading indicator, keeping ahead of price advances or declines by several days. Ten days is a commonly used time period.

Money Management: Decision-making strategies that seek to maximize the ratio of potential reward to potential risk within a given acceptable level of risk.

Open Interest: Number of open futures or options contracts. Refers to unliquidated purchases or sales, but never to their combined total. Rising open interest corroborates a price move.

Oscillator: A technical indicator that measure this the rate of change in price movement. Usually a leading indicator (acting as a precursor to price change) used to determine whether a market is overbought or oversold. Works best during periods of sideways trading.

Overbought: A term used to express the general opinion that prices have risen too high and too fast and, as a result, will decline as traders liquidate their positions.

Oversold: Analogous to "overbought" except that prices have fallen too far and too fast so probably will rebound.

Position: An interest in the market, either long or short, in the form of open contracts.

Put Option: A put option gives the holder the right to "put" (or sell) a specific future at an agreed price during the life of the option.

Resistance: A price range above the current price, where a rising price movement is likely to meet resistance to a continuation of the same price trend (see support).

Short: One who has sold a futures contract to establish a market position hoping for a price decline (the opposite of long).

Short-Term Trading: A trader or trading system that spends an average of two or three days in a trade.

Sideways Market: Period of price congestion, with no discernable uptrend or downtrend. A zone of repetitions and limited price fluctuations.

Slippage: The difference between the order placement price and the actual trade execution price.

Stop Order: An order to be executed when the market reaches a designated price level, or price differential if the order is a spread. Done usually to protect a profit or limit a loss. It also can be used to initiate a new position.

Stopped Out: The market situation in which a customer's position, long or short, was closed out, liquidated or covered as the result of an existing stop order executed and filled at either the stop price, above it or below it.

Support: A price range, below the current price, where descending price movement is likely to encounter resistance (see resistance).

Symmetrical Triangle: (Also called "Coil Formation"): Appears while prices trade in continually narrower ranges, forming converging uptrend and downtrend lines. After one of the trendlines is broken, the objective is found by adding the width of the triangle's base to the breakout point.

Technical Analysis: An approach to analysis of futures markets and commodity prices which examines the technical factors behind market activity. The technical analyst examines patterns of price change, rates of change, volume of trading and open interest. Charts are often used to help predict future trends.

Trading Range: Tends to form when buyers and sellers in a market are evenly matched. The upper and lower price boundaries become more important the longer the range has been in existence (can last from a few weeks to many years). A breakout from a range-bound market often signals the start of a significant price move.

Trading System: A system that helps a trader determine when to enter the market, when to exit the market with a profit, and when to exit with a loss, with the idea of keeping profits to a maximum and risk to a minimum.

Trend: Establish the trend and go with it. The general direction of the market. An uptrend consists of a series of higher highs and higher lows, while a downtrend is a series of lower lows and lower highs.

Volatility: A measure of the amount by which an underlying future is expected to fluctuate in a given period of time. Often expressed as a percentage and computed as the annualized standard deviation of percentage change in daily price.

Volume: The number of transactions of a futures contract made during a specified period; day, week, month or year. A transaction consists of a purchase and matching sale, or vice versa.

W-bottoms: (Also called double bottoms): Two price troughs or lows in the same relative proximity, usually confirmed by a close above the intervening high.

TRAINING COURSE MANUAL

DON'T MAKE THESE COMMON MISTAKES

(An article by Bill Cruz, President of Omega Research, Miami FL)

Mistakes in designing a system can foul up the best traders. Here are some common pitfalls to avoid.

Developing your own trading system can be a rewarding experience. In addition to a growing account balance at your brokerage firm, you will learn a lot about the markets and yourself. During my 15 years in the business I've spoken with thousands of system traders, sharing our biggest successes and our most embarrassing mistakes.

Here are some of the most common mistakes new (and many not-so-new) system developers and traders make.

I) Failing to identify the market condition for which you are developing a system.

The most common mistake, particularly among novice traders/developers, is failing to identify what type of market condition they are designing their system for. There are three types of market conditions to consider when designing a system: 1) trending market, where you design a system to catch major moves, but it keeps you on the sidelines during choppy markets; 2) choppy, sideways market for which you design a support/resistance system; and 3) markets that explode in short spurts, which profit best with volatility expansion systems.

No system I've seen (and I've seen thousands) makes money in all market conditions. The idea is to make money while the market is in one of the three conditions, and not lose money during the other two. Design a system for one of the market conditions and many of your other decisions (such as entry and exit techniques and money management control) will fall into place.

II) Over-reliance on indicators

Don't rely too much on your indicators. Explore entry and exit signals that are designed based on price relationships and price movements.

There is nothing wrong with using technical indicators, but make sure you understand what market condition this indicator is designed to be successful in. First, you should know how the indicator is calculated. If the theory and computations don't make sense to

^{chances} you, changes are you'll misuse it. As a general rule, the complexity of the indicator is inversely proportional to its usefulness and profitability.

III) Too Complicated!

Many trader/developers try to use too many price patterns and technical indicators, often in the wrong combination. Keep it simple. I'd recommend two or three market entry techniques, a straight dollar stop loss (which should never get hit except in disaster situations) and one or two market exit techniques.

IV) Curve-fitting

When a new system developer backtests his system and finds any trades that lost money, the first thing he does is go back and examine each loser and write additional trading rules that eliminate it from the results. You should examine the losers. However, only modify the entry technique in a way that makes good trading sense. If you are writing separate rules for every loser, without clearly thinking through the effect this will have on the system, you're curve-fitting.

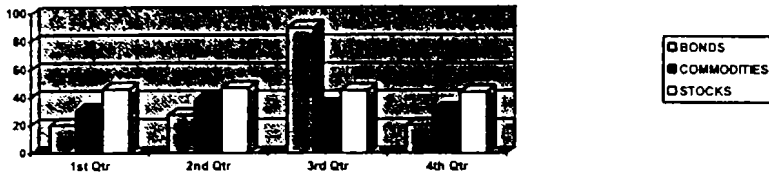
V) Ignoring the System

A final most common mistake isn't about system developing. It's about trading. Many system developers at some point fail to trade their system. When the system signals a "buy" they override it saying, "No, It doesn't feel right. I don't want to be long today." I call it an emotional override. Invariably your emotional override will pass up your most winning trades. In my experience, my biggest winners were the trades I felt the most uncomfortable about.

Realize that system trading does not feel different from system developing and testing. It should. Trading is real money! But remember, you developed your system for a certain type of market and based its trading rules on historical facts, not emotions. When you inject an emotional override, you change the expected results in wildly unpredictable ways, usually for the worse. Remember to follow your system.

TRAINING COURSE MANUAL

TRADER'S RULES



- I. DISCIPLINE, DISCIPLINE, DISCIPLINE
- II. PRESERVE CAPITAL
- III. ALWAYS TRADE WITH STOPS, ENTER STOP WHEN YOU FILL
- IV. RISK NO MORE THAN 9%, INCLUDING COMMISSIONS
- V. FOLLOW YOUR PLAN. PLAN YOUR TRADES, TRADE TO YOUR PLAN
- VI. LEARN TO TAKE A LOSS
- VII. DO NOT GET GREEDY!!!
- VIII. TRAIL YOUR STOPS
- IX. NEVER ADD TO A LOSER
- X. ADD TO WINNING POSITIONS
- XI. SCALE IN OR OUT OF YOUR POSITIONS
- XII. BE PATIENT
- XIII. NEVER BE IN A HURRY TO MAKE MONEY
- XIV. KEEP A LEVEL HEAD
- XV. ESTABLISH MAJOR TREND IN MARKET AND TRADE WITH IT
- XVI. LEARN TO LET YOUR PROFITS "RUN."
- XVII. MARKETS GO FURTHER THAN YOU THINK THEY WILL
- XVIII. IF YOU DON'T FOLLOW THE RULES, YOU'LL GET SCREWED!!!

MARGIN REQUIREMENTS — JUNE 1, 2000

COMMODITY	INITIAL	MAINTENANCE	SPREADS
CORN	675	500	270 200
OATS	270	200	135 100
SOYBEANS	1215	900	200
SOY MEAL	810	600	270
BEAN OIL	608	450	150
ROUGH RICE	675	500	338 250
WHEAT (CBOT)	748	550	135 100
KANSAS CITY WHEAT	625	500	100 100
FEEDER CATTLE	709	525	270 200
LIVE CATTLE	574	425	338 250
LEAN HOGS	878	650	540 405
PORK BELLIES	SPOT 6480/1620	SPOT 4800/1200	810 610
COPPER	1350	1000	600
GOLD (CMX)	1350	1000	100
GOLD (KILG)	675	500	100
PALLADIUM	20,225	15,000	405/31,725 300/23,500
PLATINUM	2160	1600	675 500
SILVER (CMX) — 5000 OZ.	1350	1000	100
SILVER — 1000 OZ.	338	250	100
AUSTRALIAN DOLLAR	1317	975	MKT MKT
BRITISH POUND	1249	925	MKT MKT
CANADIAN DOLLAR	540	400	MKT MKT
DEUTSCHE MARK	1249	925	MKT MKT
DOLLAR INDEX	1330	1000	500
JAPANESE YEN	4212	3120	MKT MKT
SWISS FRANC	1755	1300	MKT MKT
PESO	2500	2000	MKT MKT
EURO CURRENCY	2430	1800	250
E-MINI EURO FX	1215	900	500
EURODOLLAR (FRONT/BACK)	675	500	300
T-BILL	304	225	203 150
2-5-YEAR NOTE	878	650	350
US TREASURY BONDS	3025	1500	350
MUNICIPAL BONDS	1350	1000	350
10-YEAR NOTE	1350	1000	350
BC (MAGX)	28,350	21,000	500 300
DOW JONES IA	6750	5000	300 250
NYSE COMPOSITE INDEX (500)	8900	8900	500 300
NIKKEI INDEX	6750	5000	135
S&P 500 INDEX	23,435	18,750	250
E-MINI S&P	4685	3750	25
EURO-TOPI (CMX)	11000	11000	500
VALE LINE	3500	2800	300 250
MID-CAP 400	13,500	10,000	135
NASDAQ 100	37,000	30,000	473
E-MINI NASDAQ 100	7500	6000	100
CRUDE OIL	3375	2500	540 (1000 FRONT MONTH)
HEATING OIL	3375	2500	540 (1000 FRONT MONTH)
UNLEADED GAS	3375	2500	540 (1000 FRONT MONTH)
NATURAL GAS	3375	2750	2130 1800
COCOA (ALL MONTHS)	840	600	210 150
COFFEE (1ST, 2ND & 3RD)	3150	2250	1500
SUGAR (SPOT/ATMERS)	700	500	2800/140
CRB INDEX	1300	1300	400 300
CRITEX	1000	750	800 600
LUMBER	1650	1100	600 400
ORANGE JUICE	700	500	250 200

INTERMARKET SPREADS

	INITIAL	MAINTENANCE
CBOT WHEAT VS. KANSAS CITY WHEAT	453	350
SOYBEAN CRUSH (10 BEANS, 1 MEAL, 9 BEAN OIL)	4314	3196
"MINI CRUSH" (1 BEAN, 1 MEAL, 1 BEAN OIL)	426	316
LIVE CATTLE VS. FEEDER CATTLE	945	700
LIVE CATTLE VS. LEAN HOGS	1080	800
PORK BELLIES VS. LEAN HOGS	1418	1050
DEUTSCHE MARK VS. SWISS FRANC	642	475
DEUTSCHE MARK VS. SWISS FRANC VS. JAPANESE YEN	2700	
DEUTSCHE MARK VS. BRITISH POUND	1485	1100
BRITISH POUND VS. JAPANESE YEN	3240	2400
BRITISH POUND VS. SWISS FRANC	1620	1200
T-BILL VS. EURO DOLLAR	237	175
TREASURY BOND VS. MUNICIPAL BOND	1046	775
TREASURY BOND VS. 10-YEAR NOTE	1080	800
S&P 500 VS. VALE LINE (2:3)	24,250	19,900
CMX GOLD VS. CMX SILVER (2:3)	3510	3200
CMX GOLD VS. NYME PLATINUM (1:2)	1485	1100
HEATING OIL VS. UNLEADED GAS	1620	1200
CRUDE OIL VS. HEATING OIL	1418	1050
CRUDE OIL VS. UNLEADED GAS	1418	1050
CRACK SPREAD (3 CRUDE VS. 1 HEATING OIL, 2 UNLEADED GAS)	8450	

MID-AM MARGINS

COMMODITY	INITIAL	MAINTENANCE
Oats	54	40
Beans	243	180
Wheat	148	110
Corn	135	100
Meal	405	300
Bean Oil	304	225
Hogs	845	500
Cattle	321	238
Bonds	1013	750
5/10yr Notes	439/675	323/500
T-Bills	149	110
British	257	190
Canadian	351	260
Euro Curr	1053	780
Yen	1458	1080
Swiss	743	550
ED	337	250
Gold	675	500
Silver	405	300
Platinum	608	450

MARGINS ARE PERFORMANCE BONDS SUBJECT TO CHANGE WITHOUT NOTICE.

FINANCIAL FUTURES CONTRACT SPECIFICATIONS

December 1, 1998

CONTRACT CURRENCIES	EXCH.	HOURS (LTD.)	SIZE	MONTHS	FLUCTUATION	PT. VALUE	LIMIT
AUSTRALIAN DOLLAR	CME	7:20 - 2:00 (9:16)	AD 100,000	HMUZ	1 POINT = \$10.00	1.00 = \$1000	CHECK WITH YOUR TRADING DESK
BRITISH POUND	CME	7:20 - 2:00	BP62,500	HMUZ	2 POINTS = \$12.50	1.00 = \$625	"
"	IFP	2:00PM - 7:20AM	BP62,500	HMUZ	2 POINTS = \$12.50	1.00 = \$625	"
"	MA	7:20 - 2:15 (9:31)	BP12,500	HMUZ	2 POINTS = \$2.50	1.00 = \$125	"
CANADIAN DOLLAR	CME	7:20 - 2:00 (9:16)	CD100,000	HMUZ	1 POINT = \$10.00	1.00 = \$1000	"
"	IFP	2:00PM - 7:20AM	CD 100,000	HMUZ	1 POINT = \$10.00	1.00 = \$1000	"
"	MA	7:20 - 2:15	CD50,000	HMUZ	1 POINT = \$5.00	1.00 = \$500	"
DEUTSCHE MARK	CME	7:20 - 2:00 (9:16)	DM125,000	HMUZ	1 POINT = \$12.50	1.00 = \$1250	"
"	IFP	2:00PM - 7:20AM	DM125,000	HMUZ	1 POINT = \$12.50	1.00 = \$1250	"
"	MA	7:20 - 2:15 (9:31)	DM62,500	HMUZ	1 POINT = \$6.25	1.00 = \$625	"
JAPANESE YEN	CME	7:20 - 2:00 (9:16)	JY 12,500,000	HMUZ	1 POINT = \$12.50	1.00 = \$1250	"
"	IFP	2:00PM - 7:20AM	JY 12,500,000	HMUZ	1 POINT = \$12.50	1.00 = \$1250	"
"	MA	7:20 - 2:15 (9:31)	JY6,250,000	HMUZ	1 POINT = \$6.25	1.00 = \$625	"
SWISS FRANC	CME	7:20 - 2:00 (9:16)	SF 125,000	HMUZ	1 POINT = \$12.50	1.00 = \$1250	"
"	IFP	2:00PM - 7:20AM	SF125,000	HMUZ	1 POINT = \$12.50	1.00 = \$1250	"
"	MA	7:20 - 2:15 (9:31)	SF62,500	HMUZ	1 POINT = \$6.25	1.00 = \$625	"
US DOLLAR INDEX	NYCB	7:05 - 2:00 (9:00)	\$1000 X INDEX	HMUZ	1 POINT = \$10.00	1.00 = \$1000	"
ECU	NYCB	7:20 - 2:00 (9:00)	ECU100,000	HMUZ	1 POINT = \$10.00	1.00 = \$1000	"
MEXICAN PESO	CME	8:00 - 2:00	500,000	HMUZ	2.5 POINTS = \$12.50	1.00 = \$500	"
ECU (STARTS JAN '99)	CME	7:20 - 2:00	100,000	HMUZ	1 POINT = \$10.00	1.00 = \$1000	"
INTEREST RATES							
EURODOLLARS	CME	7:20 - 2:00 (5:00 AM)	\$1,000,000	HMUZ	1/2 POINT = \$12.50	1.00 = \$2500	NONE
"	SMX	5:45PM - 3:20AM CST	\$1,000,000	HMUZ	1/2 POINT = \$12.50	1.00 = \$2500	NONE
LINER CME	CME	7:20 - 2:00 (5:00 AM)	\$3,000,000	ALL	1 POINT = \$25.00	1.00 = \$2500	NONE
MUNICIPAL BONDS	CBOT	7:20 - 2:00	\$1,000 X INDEX	HMUZ	1/32 = \$31.25	1.00 = \$1000	3.00 = \$3000
TREASURY BILLS	CME	7:20 - 2:00 (10:00)	\$1,000,000	HMUZ	1 POINT = \$25.00	1.00 = \$2500	NONE
"	MA	7:20 - 2:15 (10:15)	\$500,000	HMUZ	1 POINT = \$12.50	1.00 = \$1250	NONE
TREASURY BONDS	CBOT	7:20 - 2:00 (12:00)	\$100,000	HMUZ	1/32 = \$31.25	1.00 = \$1000	3.00 = \$3000
"	MA	5:20PM - 8:05PM CST, 6:20PM - 9:05PM CDT					
TREASURY NOTES (10-Yr.)	CBOT	7:20 - 3:15 (12:00)	\$50,000	HMUZ	1/32 = \$15.625	1.00 = \$500	3.00 = \$1500
"	MA	SAMEAS T-BOND TIMES	\$100,000	HMUZ	1/32 = \$31.25	1.00 = \$1000	3.00 = \$3000
TREASURY NOTES (5-Yr.)	CBOT	7:20 - 3:15 (12:00)	\$50,000	HMUZ	1/32 = \$15.625	1.00 = \$500	3.00 = \$1500
TREASURY NOTES (2-Yr.)	CBOT	7:20 - 2:00 (12:00)	\$100,000	HMUZ	1/64 = \$15.625	1.00 = \$1000	3.00 = \$3000
"		7:20 - 2:00 (12:00)	\$200,000	HMUZ	1/128 = \$15.625	1.00 = \$2000	1.00 = \$2000
INDICES							
CRB INDEX	NYFE	8:40 - 2:15 (1:45)	\$500 X INDEX	POIMQZX	5 POINTS = \$25.00	1.00 = \$500	CHECK WITH YOUR TRADING DESK
EUROSTP 100	CMX	4:30AM - 10:30AM (7:00)	\$100 X INDEX	HMUZ	5 POINTS = \$10.00	1.00 = \$100	"
MID-CAP 400 INDEX	CMB	8:30 - 3:15	\$300 X INDEX	HMUZ	5 POINTS = \$25.00	1.00 = \$500	"
NIKKEI 225 AVERAGE	CMB	8:00 - 3:15	\$300 X INDEX	HMUZ	5 POINTS = \$25.00	1.00 = \$500	"
NYFE INDEX	NYFE	8:30 - 3:15	\$300 X INDEX	HMUZ	5 POINTS = \$25.00	1.00 = \$500	"
S&P500 INDEX	CME	8:30 - 3:15	\$250 X INDEX	HMUZ	5 POINTS = \$25.00	1.00 = \$500	"
KC VALUE LINE INDEX	KCBT	8:30 - 3:15	\$300 X INDEX	HMUZ	10 POINTS = \$25.00	1.00 = \$250	"
MINI VALUE LINE INDEX	KCBT	8:30 - 3:15	\$300 X INDEX	HMUZ	5 POINTS = \$25.00	1.00 = \$500	"
GOLDMAN SACHS INDEX	CME	8:30 - 3:15	\$100 X INDEX	HMUZ	5 POINTS = \$5.00	1.00 = \$100	"
RUSSELL 2000 INDEX	CME	8:15 - 2:15	\$250 X INDEX	ALL MONTHS	10 POINTS = \$25.00	1.00 = \$250	"
NASDAQ 100 INDEX	CMB	8:30 - 3:15	\$500 X INDEX	HMUZ	5 POINTS = \$25.00	1.00 = \$500	"
DOW JONES IND. A.V.O.	CBOT	8:15 - 3:15	\$100 X AVERAGE	HMUZ	5 POINTS = \$5.00	1.00 = \$100	"
E-MINI S&P500	CME	24 HOURS EXCEPT 3:15PM - 3:30PM MON-THUR, 3:15PM - 3:30PM SUN	\$50 X INDEX	HMUZ	1/2 POINT = \$5.00	1.00 = \$10	"

NOTES: (1) EXCEPT FOR PHYSICAL (IFP) MARKETS MAY NOT BE AVAILABLE FOR BACK MONTHS. (2) IN TRADES INITIAL AFFIXED TO SUNDAY KNOWN. (3) IN ORDER, CERTAIN TYPES OF DERIVATIVES MAY BE TRADED. (4) NOT ALL MARKETS HAVE THE SAME VARIATIONS. (5) VARIATIONS MAY APPLY UNDER CERTAIN CIRCUMSTANCES. (6) CONTACT YOUR TRADING DESK FOR DETAILS. (7) F = FEBRUARY, G = MARCH, H = APRIL, K = MAY, M = JUNE, N = JULY, Q = AUGUST, U = SEPTEMBER, V = OCTOBER, X = NOVEMBER, Z = DECEMBER. (8) THE FIRST DAY OF THE MONTH (JANUARY, WILL BE THE FIRST DAY OF THE MONTH). (9) HAS BEEN COMPLETED BY THE EXCHANGE. (10) SPECIFIC FUTURE CONTRACTS MAY BE TRADED WITH A FUTURE CONTRACT. (11) CONTACT YOUR TRADING DESK FOR THE APPROPRIATE EXCHANGE. (12) CME CURRENTLY HAS A FUTURE CONTRACTS LIST. (13) MINUTE TRADING. (14) STOCK INDEXES MAY HAVE A FUTURE CONTRACT. (15) CONTACT YOUR TRADING DESK.

COMMODITY FUTURES CONTRACT SPECIFICATIONS

December 1, 1998

CONTRACT	EXCH.	HOURS (LTR.)	SIZE	MONTHS	FLUCTUATION	Pt. VALUE	LIMIT
METALS							
GOLD, KILO	CBOT	7:20 - 1:40	32.15 OZ	GIMQVZ	\$.10/oz	\$32.15	\$50/oz = \$1607.50
GOLD, N.Y.	CMX	7:20 - 1:30	100 OZ	GIMQVZ	\$.10/oz	\$10.00	\$75/oz = \$7500
GOLD, N.Y.	EFP	1:30PM - 7:20AM	100 OZ	GIMQVZ	\$.10/oz	\$10.00	\$75/oz = \$7500
COPPER	CMX	7:10 - 1:00	25,000 LBS	ALI	.05c/Lb	\$12.50	20c/Lb = \$5000
PALLADIUM	NYMEX	7:10 - 1:20	100 OZ	HMUZ	\$.05/oz	\$5.00	\$6/oz = \$600
PLATINUM	NYMEX	7:20 - 1:30	50 OZ	PJNV	\$.10/oz	\$5.00	\$25/oz = \$1250
SILVER, N.Y.	CMX	7:25 - 1:25	5000 OZ	HKNUZ	.10c/oz	\$5.00	\$1.50/oz = \$7500
SILVER, N.Y.	EFP	1:25PM - 7:25AM	5000 OZ	HKNUZ	.10c/oz	\$5.00	\$1.50/oz = \$7500
SILVER, NEW	CBOT	7:25 - 1:25	1000 OZ	GIMQVZ	.10c/oz	\$1.00	\$1/oz = \$1000
ENERGIES							
CRUDE OIL	NYMEX	8:45 - 2:10 (1:40-2:10)	1000 BBL	ALI	\$.01/BBL	\$10.00	\$1.50/BBL = \$1500 (\$15/BBL FRONT 2 MONTHS)
HEATING OIL	NYMEX	8:50 - 2:10 (1:40-2:10)	42,000 GALS	ALI	.01¢/GAL	\$4.20	40¢/GAL = \$1680 (\$0.04/GAL FRONT 2 MONTHS)
UNLEADED GAS	NYMEX	8:50 - 2:10 (1:40-2:10)	42,000 GALS	ALI	.01¢/GAL	\$4.20	40¢/GAL = \$1680 (\$0.04/GAL FRONT 2 MONTHS)
NATURAL GAS	NYMEX	9:00 - 2:10	10,000 MMBTU	ALI	.1¢/MMBTU	\$10.00	15¢/MMBTU = \$1500 (\$1.50/MMBTU FRONT 2 MONTHS)
ELECTRICITY	NYMEX	8:55 - 2:30	736 MWH/MONTH	ALI	\$.01/MWH	\$7.36	\$1.50/MWH = \$1104 (\$15.00/MWH FRONT 2 MONTHS)
GRAINS & LEGUMES							
CORN	CBOT	9:30 - 1:15 (12:00)	5000 BUSHELS	HKNUZ	1/4¢/BU	\$12.50	12¢/bu = \$600
CORN	MA	9:30 - 1:45 (12:15)	1000 BUSHELS	HKNUZ	1/8¢/BU	\$1.25	12¢/bu = \$120
OATS	CBOT	9:30 - 1:15 (12:00)	5000 BUSHELS	HKNUZ	1/4¢/BU	\$12.50	10¢/bu = \$500
OATS	MA	9:30 - 1:45 (12:15)	1000 BUSHELS	HKNUZ	1/8¢	\$1.25	10¢/bu = \$100
RICE	CRCE	9:15 - 1:30	2000 CWT (200,000 LBS)	PHKNUX	\$.005/CWT	\$10.00	30¢/CWT = \$600
SOYBEANS	CBOT	9:30 - 1:15 (12:00)	5000 BUSHELS	PHKNUQX	1/4¢	\$12.50	30¢/bu = \$1500
SOYBEANS	MA	9:30 - 1:45 (12:15)	1000 BUSHELS	PHKNUQX	1/8¢	\$1.25	30¢/bu = \$300
SOYBEAN MEAL	CBOT	9:30 - 1:15 (12:00)	100 TONS	PHKNQUVZ	\$.10/TON	\$10.00	\$10/TON = \$1000
SOYBEAN MEAL	MA	9:30 - 1:45 (12:15)	50 TONS	PHKNQUVZ	\$.10	\$2.00	\$10/TON = \$200
SOYBEAN OIL	CBOT	9:30 - 1:15 (12:00)	60,000 LBS	PHKNQUVZ	\$.0001/Lb	\$6.00	\$0.01/Lb = \$600
SOYBEAN OIL	MA	9:30 - 1:45	30,000 LBS	PHKNQUVZ	2.5/100Lb	\$6.25	\$0.01/Lb = \$300
WHEAT	CBOT	9:30 - 1:15 (12:00)	5000 BUSHELS	HKNUZ	1/4¢/BU	\$12.50	20¢/bu = \$1000
WHEAT	KCBT	9:30 - 1:15	5000 BUSHELS	HKNUZ	1/4¢	\$12.50	25¢/bu = \$1250
WHEAT	MGE	9:30 - 1:15	5000 BUSHELS	HKNUZ	1/4¢	\$12.50	20¢/bu = \$1000
WHEAT	MA	9:30 - 1:45 (12:15)	1000 BUSHELS	HKNUZ	1/8¢	\$1.25	20¢/bu = \$200
PROJECT A GRAINS	CBOT	9:00PM - 4:30AM					
MEATS							
PURDER CATTLE	CME	9:05 - 1:00 (12:00)	50,000 LBS	PHKQUVX	2.5 POINTS	\$12.50	1.5¢/Lb = \$750
LIVE CATTLE	CME	9:05 - 1:00 (12:00)	40,000 LBS	GIMQVZ	2.5 POINTS	\$10.00	1.5¢/Lb = \$600
LIVE CATTLE	MA	9:05 - 1:15 (12:15)	20,000 LBS	GIMQVZ	2.5 POINTS	\$5.00	1.5¢/Lb = \$300
LEAN HOGS	CME	9:10 - 1:00 (12:00)	40,000 LBS	GIMQVZ	2.5 C/100Lb	\$10.00	2¢/Lb = \$800
LEAN HOGS	MA	9:10 - 1:15 (12:15)	20,000 LBS	GIMQVZ	2.5¢/Lb	\$5.00	2¢/Lb = \$300
PORK BELLIES	CME	9:10 - 1:00 (12:00)	40,000 LBS	GIKNO	2.5¢/100Lb	\$10.00	3.0¢/Lb = \$1200
EXOTICS							
COCOA	CSCE	7:30 - 12:30	10 METRIC TONS	HKNUZ	1 POINT	\$10.00	\$88/TON = \$880 (NO LIMIT FRONT 2 MONTHS)
COPPER	CSCE	8:15 - 12:32	37,500 LBS	HKNUZ	1 POINT	\$3.75	6¢/Lb = \$2250 (NO LIMIT FRONT 2 MONTHS)
COTTON	NYCE	9:30 - 1:40 (11:30)	50,000 LBS	ALI	.01¢/Lb	\$5.00	2¢/Lb = \$1000
ORANGE JUICE	NYCE	9:15 - 1:15 (11:00)	15,000 LBS	PHKNUX	.05¢/Lb	\$7.50	5¢/Lb = \$750 (10¢/Lb FRONT MONTH)
SUGAR	CSCE	8:30 - 12:20	112,000 LBS	HKNUZ	1 POINT	\$11.20	.5¢/Lb = \$560 (NO LIMIT FRONT 2 MONTHS)
LUMBER	CMB	9:00 - 1:05 (12:05)	80,000 LBS	PHKNUX	10¢/1000	\$8.00	\$10/1000 BOARD FEET

NOTE #1: EXCHANGE FOR PHYSICAL (EFP) MARKETS MAY NOT BE AVAILABLE FOR BACK MONTHS, OR FOR TRADES FRIDAY AFTERNOON TO SUNDAY EVENING. IN ADDITION, CERTAIN TYPES OF ORDERS MAY NOT BE ACCEPTED.

NOTE #2: IN ALL MARKETS WHICH HAVE LIMITS, VARIABLE LIMITS MAY APPLY UNDER CERTAIN MARKET CONDITIONS. CONTACT YOUR TRADING DESK FOR DETAILS.

P = JANUARY Q = FEBRUARY H = MARCH J = APRIL K = MAY M = JUNE N = JULY O = AUGUST U = SEPTEMBER V = OCTOBER X = NOVEMBER Z = DECEMBER

THE INFORMATION CONTAINED HEREIN, WHILE NOT GUARANTEED, HAS BEEN COMPILED FROM SOURCES CONSIDERED RELIABLE AND ACCURATE. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITS ARE SUBJECT TO CHANGE UNDER EXTREME MARKET CONDITIONS. IF IN DOUBT, CONTACT YOUR TRADING DESK OR THE APPROPRIATE EXCHANGE.

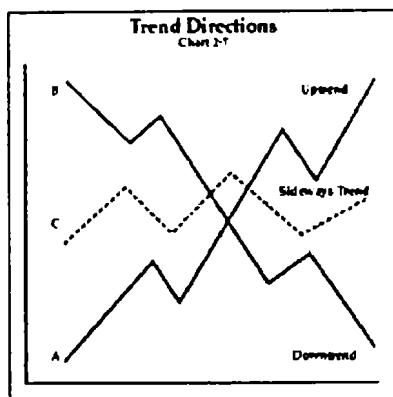
TRAINING COURSE MANUAL

USING DAILY BAR CHARTS

The main use of all these charts is to determine the trend in the market and to use that information to trade profitably. There are a number of tools that can be used to determine the direction of the trend and then try to predict when it will change.

Before discussing those tools, however, let's talk a little about a trend. In a general sense a trend is the direction of the market, i.e., the direction in which the prices are moving. Of course, the market moves irregularly in a series of peaks and troughs, but it is the general direction of those peaks and troughs that constitutes a market trend.

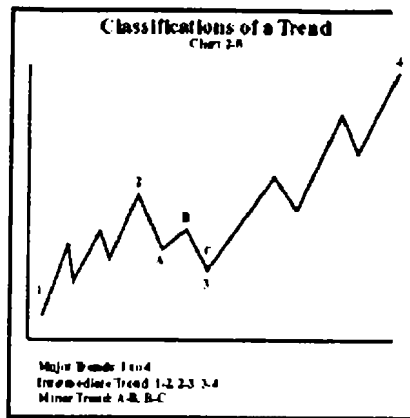
The market can move in three directions; up, down and sideways. An up-trend is defined as a series of successively higher peaks and higher troughs. A down-trend would be defined as a series of successively lower peaks and lower troughs. A sideways trend would be defined as a series of horizontal peaks and troughs. A sideways trend is sometime erroneously called a trendless condition or a period with no trend at all.



There are three classifications of trends. They are major or primary, intermediate or secondary, and minor or near-term trends. On Chart 2-8, the major trend is 1-4, the intermediate trends are 1-2-3-3, 3-4, and the short term trends are 2-4a, A-B, B-C. The Dow theory classifies a major trend as being effective for longer than one year which is about right for the stock market. In commodity futures, however the major trend is probably more appropriately anything over six months. The intermediate trend in the Dow theory is three weeks to three months, but in the futures market it could be from three weeks to as much as six months. The minor trend is

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usually defined as less than three weeks in length. Each trend becomes a portion of its next larger trend.

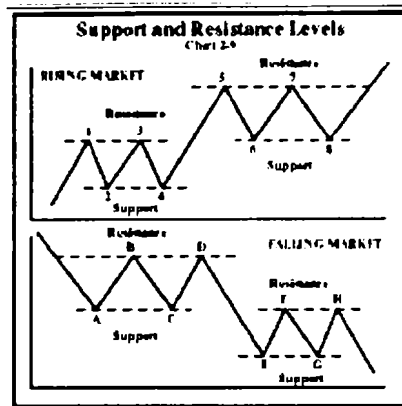


As a general rule, most trend-following approaches in the futures markets focus on the intermediate trend which is from about three weeks to six months.

TRAINING COURSE MANUAL

SUPPORT AND RESISTANCE LEVELS

The basic tool for analyzing a chart is the use of support and resistance levels (S/R levels). First, however, it is important to know what is meant by S/R levels. Chart 2-9 shows major lows and highs acting as S/R levels; in a rising market in 2-9A, and in a falling market in 2-9B.



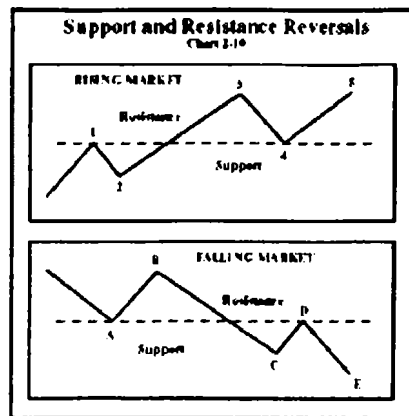
A support level is a price on the chart below the current market level at which a decline in prices is usually halted and prices turn back up. This is a price level where sellers suddenly become wary, buying interest takes over and prices begin to rise.

A resistance level is a price on the chart above the current market level, at which a rise in prices is usually halted and prices turn back down. This is a price level where buyers suddenly become wary, selling interest takes over and prices begin to fall.

Both support and resistance levels can occur in either rising or falling markets.

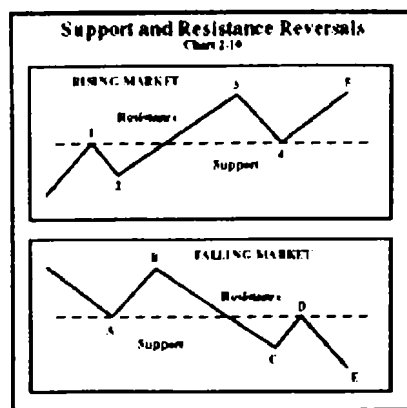
Using highs and lows as an example, let's discuss how support and resistance levels work.

On Chart 2-10A, which depicts a generally rising market, assume prices move lower in a corrective action from price 1 to price 2. Traders who went long near price 1 want to get out and plan to do so as soon as the price gets back up to near where they bought. Traders who went short near price 1 wish they had sold more at that price and plan to do so as soon as the price gets back up to near where they sold it the first time. Traders who were out of the market at the time wish they had sold short and plan to do so as soon as the price gets back up near the original price.



As the price moves back down toward 2 traders who are short think it won't go below 2 and begin to cover their positions. Those who are out of the market think the same way and decide to buy. The buying keeps the price from falling below level 2 and it therefore becomes a support level.

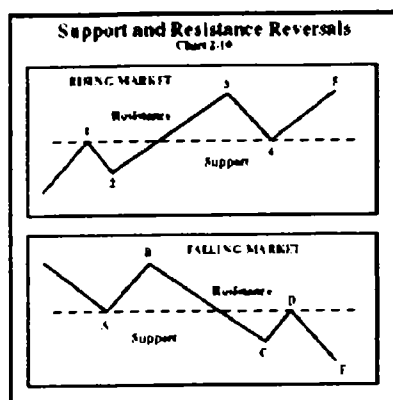
On Chart 2-10B, which depicts a falling market the reverse happens. Assume that in a correction to the general downtrend, prices rise from point 1 to 2. Those traders who were out of the market wish they had bought and the longs wish they had bought more. Both decide to buy at the next significant dip near the old price. Shorts realize that they are on the wrong side of the market and decide to cover their positions at the next significant dip. Then, as the price moves back down toward the former low at level 1, the out and the longs decide to get in with new buying, and the shorts decide to cover their positions near where they sold. As a result the buying keeps the price from going any lower and the price level 1 becomes a support level.



However, in both situations there comes a time when there is not enough buying or selling to overcome the up or down trend that is in effect and prices move higher or lower right through the resistance or support level. Now what happens is that the levels reverse roles and the former

resistance level becomes a new support level and the former support level becomes a resistance level.

To illustrate this, look at Chart 2-10A.



Assume that there was not enough selling to overcome the up-trend and the price goes through resistance level 1 and goes up to point 3. Those out of the market wish they had bought, longs wish they had bought more, and so both decide to buy at the next significant dip. Shorts realize that they are on the wrong side of the market and decide to cover their positions at the next dip. As the price moves back down toward the former high at level 1, the outs and the longs decide to buy, and shorts buy to cover their positions near where they had sold. The buying keeps the price from going any lower and the old price becomes a support level at price 4.

The same thing happens in reverse in a falling market as shown in Chart 2-10B. Once the price has moved below the support level 2, the price level reverses roles and becomes a resistance level at point 4.

Now come the questions as to why S/R levels work at all. The basic theory is that S/R levels work simply because so many market participants agree on the importance of levels. The S/R levels therefore become self-fulfilling prophecies – which was one of the criticisms of technical analysis. For example, if the majority of key traders believe that the October 2000 low of 48-7/16 in Microsoft is important, then it is important. Thus if Microsoft breaks back down to that level, traders who are short will tend to take profits and traders who are bullish will tend to start buying. This buying will cause the market to stop at that support level.

If this theory is correct, then it is important that a trader does not look for secret or obscure S/R levels. Instead he or she should look at the common S/R levels being watched by the key traders because these are the only ones that will work.

TRAINING COURSE MANUAL

IDENTIFYING SUPPORT AND RESISTANCE LEVELS

There are many different ways of identifying S/R levels. Some of the best S/R levels include:

- Major highs and lows
- Trend lines
- Retracements
- Moving Averages
- Reversal Days
- Gaps
- Chart patterns such as the well-known head & shoulders pattern

We'll discuss the first six of these in this lesson and then cover chart patterns in Lesson 3.

Some S/R levels are more significant than others. What makes a particular S/R more significant includes such things as the longer the period of time trading takes place in the S/R area, how often the S/R level has performed in the role of reversing the trend before, the greater the volume of trading, and how recently the trading took place.

On a cautionary note, if a trader decides to use the S/R level as a buy or sell point, it is best to take the buy or sell action a few ticks before the actual S/R level is reached. The idea is that once the S/R has been reached, the market will tend to move quickly and it may be harder to make a profit.

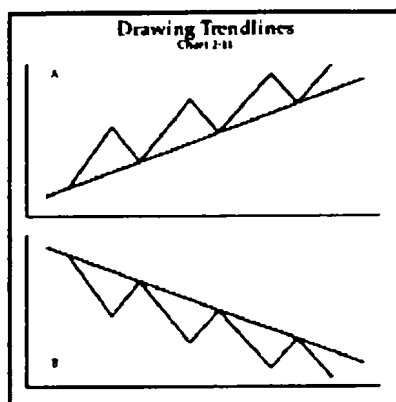
On the other hand, if a trader is not sure about the value of the S/R level, it may be prudent to wait for the price to hit the level and then watch to see if it penetrates the S/R by a "Significant Amount". If this happens, prices will probably not reverse but will continue in the direction of the trend. Determining the "Significant Amount" is the tricky part. One way is to look for sustained penetration of a S/R level; i.e., at least a close beyond the level, not just an intra-day penetration. Perhaps even a several-day close beyond that level should be considered.

Since the use of major highs and lows of S/R has already been covered, let's go over some of the other ways to identify S/R levels.

TRAINING COURSE MANUAL

TREND LINES

First let's review how to draw a trend line. As shown in Chart 2-11A, an uptrend line is a straight line drawn upward through a series of successive lows. A down trend line is a straight line drawn downward through a series of successive highs as shown in chart 2-11B.

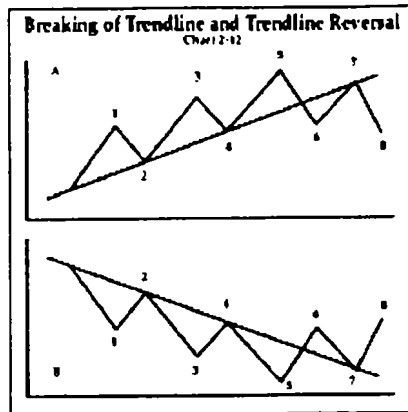


At least two points are needed to draw a trend line. The first evidence of a possible up-trend, for example, is when there are two lows with the second one being higher than the previous one. A trend line can now be drawn, but it must be considered only as a "tentative" trend line. The trend line will be confirmed when a third point falls on the tentative trend line.

Once a trend line has been formed, it can be used to identify support or resistance levels. As discussed in Lesson 1, a trend in motion will tend to remain in motion in the same direction and at the same slope. Then when the inevitable corrective dips or rises occur, prices will come back to very close to the trend line and then reverse. Because the intent of the trader is to buy dips in an up-trend, the trend line provides a support under the market that can be used as a buying area. In 2-12A, points 2 & 4 are buying opportunities. Conversely a down trend line can be used as a resistance area for selling purposes and in Chart 2-12B, points 2 & 4 become selling opportunities.

Once the trend line has been taken out, it may indicate that the trend has reversed. That would call for the possible liquidation of all positions in the direction of the previous trend. Very often the breaking of the trend line is one of the best early warnings of a possible change in trend. But because a reversal in a trend line is so important, it is necessary to be sure of what is happening. For example, as a general rule, a close or settlement beyond the trend line is more significant than just an intra-day penetration. Sometimes even a closing penetration is not enough, so many technical analysts use a variety of time and price filters to help identify valid trend line

penetrations. Other price filters could be that the price should penetrate the trend line price by at least 3% of the price, or the trend line must be broken by closing beyond the trend line for two successive days.



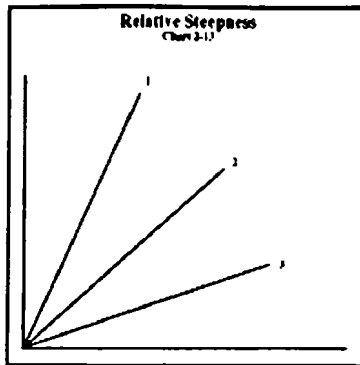
Once a trend line has been broken, the line reverses roles and becomes a new support or resistance level. This is shown on Chart 2-12A where point 7 on the up-trend line has become a resistance level. The reverse is true on Chart 2-12B where point 7 has become a support level. Because of this role reversal it is often useful to extend the former trend line beyond where the trend reversed direction.

Another important use of trend lines is to determine how far prices will move in the new direction. Once a trend line is broken, prices will usually move a distance beyond the trend line equal to the vertical distance that prices achieved on the other side of the trend line, prior to the trend reversal. For example, on Chart 2-12A, if at point 5 prices had risen \$50 above the trend line measured vertically, then prices would be expected to drop by the same \$50 below the trend line to point 6 after it was broken.

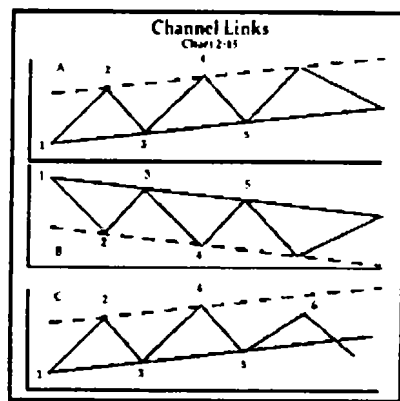
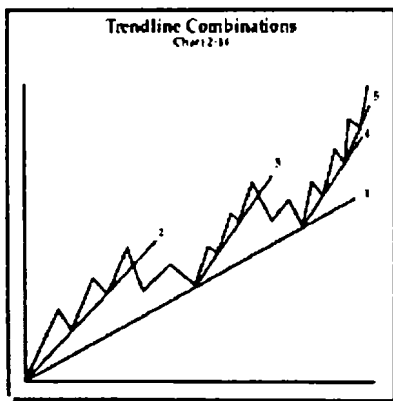
A trend line becomes more significant the longer it has been intact and the more time it has been tested and not broken. The more significant the trend line, the more confidence it inspires and the more important its penetration becomes.

The steepness of the trend line can also be important. In general, the most important trend lines tend to have an average slope up (or down) of about 45-degrees. That is illustrated on the chart as up-trend 2. this 45-degree slope represents a perfect balance of time and price movement. If a trend line is more than 45-degrees, like trend line 1 on the chart, it usually indicates that prices are advancing (or falling) too rapidly and the sharp rise (or fall) cannot be sustained. On the other hand, if the trend line is less than 45-degrees, like trend line 3 on the chart, it may indicate that the up (or down) is too weak and can't continue.

Often a technical analyst will follow several different trend lines at the same time. On Chart 2-14, the major trend is #1, the intermediate trends are #2, #3, and #4, and the minor is #5. All of them can be used to indicate trends in price movements over various time frames.



A variation of the trend line usage is the use of channels. In Chart 2-15A, an up-trend line is drawn through the lows. However, the market may sometimes create a series of highs that can also be connected with a straight line parallel to the trend line. The result is a channel within which prices oscillate between the top and bottom lines. The top line of the channel becomes a series of resistance levels and the trend line at the bottom becomes a series of support levels. The reverse is true of a downtrend as shown in 2-15B.



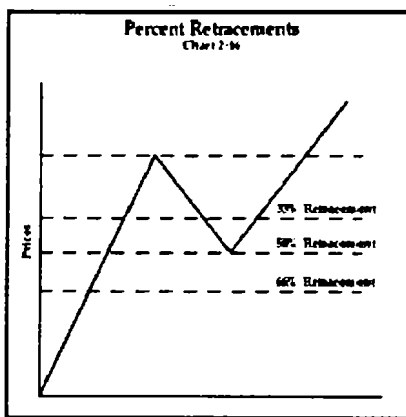
The value of this pattern is that the basic up-trend line along the bottom can be used for taking new positions and the channel line along the top can be used for short-term profit taking. The reverse is true in a downtrend as shown in 2-15B.

The breaking of the trend line as shown in Chart 2-15C would be viewed as a possible reversal of the trend. The breaking of the upper channel line, however, might signal the acceleration of the existing trend. A failure to reach the channel line might signal a weakening trend. Once a breakout occurs from an existing price channel, prices usually travel a distance equal to the width of the channel. Always remember, however, that the basic trend line is more important and more reliable by far.

TRAINING COURSE MANUAL

RETRACEMENTS

In all the previous examples of price changes, the prices retreated from the up-trend or advanced from the downtrend before they resumed their move in the original direction. These brief counter-trend moves are called retracements, i.e., they retrace part of the earlier up or down move. On Chart 2-16, the price line is shown as starting at 100 and rallying to 200. At 200 the price reverses and moves down to 150. This corrective down move is called a retracement. The best known is when the price falls halfway back to the starting price. This is called a 50% retracement and occurs frequently.



There are also minimum and maximum retracements of about 33% and 67%, or $1/3$ and $2/3$. In correction of a strong trend, the market will often retrace at least $1/3$ of the previous move and continue down to 50%. This is useful information because the 33-50% retracement range is a good area for buying or selling opportunities.

The 67% ($2/3$) retracement is an especially critical because if the trend is to be maintained, the correction should stop at the $2/3$ point. If the retracement goes much beyond the $2/3$ point, a reversal is probably taking place and the price will retrace the entire 100% of the prior up move.

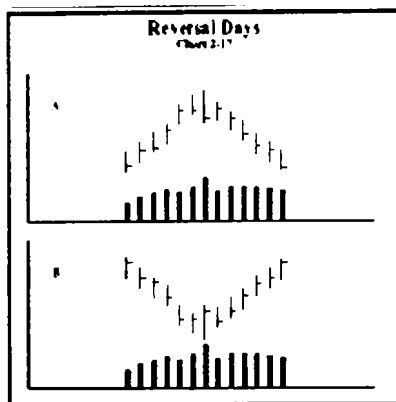
Two other frequently used retracement levels are 38.2% and 61.8%. These are two Fibonacci numbers that will be discussed later.

TRAINING COURSE MANUAL

REVERSAL DAYS

A reversal day is a single day in which prices dramatically reverse direction. A top reversal day is defined as the setting of a new high in an up-trend followed by a lower close on the same day. A bottom reversal day would be a new low in a downtrend followed by a higher close on the same day.

By itself this one-day event may not be significant, but when taken in the context of other information, it can sometimes be very important. For example, the wider the price range during that one day and the heavier the volume, the more significant is the signal of a possible near-term trend reversal.



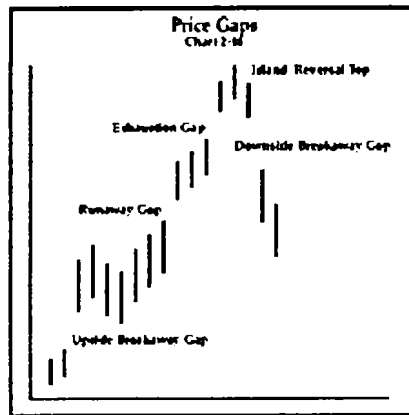
Also notice that in our example of a top-reversal day on Chart 17A the reversal day has a higher high and lower low than the previous day and settled lower. This is called an “outside-day-down”. On Chart 17B a bottom-reversal took place in the same way but in the opposite direction and this is called an “outside-day-up”. These conditions also give the reversal day more significance.

Most reversal days occur as part of a larger pattern such as Head and Shoulders. A key reversal day, which is the day the real trend reversal occurred, can only be identified after the fact. Until that time it is only a reversal day.

TRAINING COURSE MANUAL

PRICE GAPS

A price gap is simply a price area on the bar chart where no trading takes place. As a result there is an open space or gap between the prices shown on two adjacent days. An upside gap occurs when the low of one day is higher than the high of the previous day. It is a sign of market strength. A downside gap occurs when the high of one day is lower than the low of the previous day and it is a sign of market weakness.



There are four types of gaps and these can occur when the market is moving in either direction. The Common Gap (which is not shown on the Chart 2-18) is just a gap that appears from time to time and is the least important. It is also not very useful for forecasting purposes because it is usually just the result of a very thinly traded market. It appears often at the time a new contract is just beginning to be traded.

The second type of gap is the Breakaway Gap as shown on the chart during an upmove. It usually occurs at the completion of an important price pattern (in this case a rectangle formation), and usually signals the beginning of a significant market move. This type of gap usually occurs on heavy volume and is usually not filled in with trading over the near-term. These gaps usually act as good support and resistance areas.

The third type of gap is the Runaway or Measuring Gap as shown on the chart in the context of a rally. After the move has been underway for a while, prices will suddenly leap forward to form a runaway gap. This type of gap shows that the market is moving effortlessly on moderate volume. It is a sign of strength in an up-market and a sign of weakness in a down-market. This type of gap can also be a good support and resistance area. This gap is sometimes called a Measuring-Gap because it usually occurs at about the halfway point in a trend and can be used to estimate the extent of the remaining move.

The fourth type of gap is the Exhaustion Gap as shown on the chart. This type of gap occurs near the end of a market move where in the up-move, for example, prices leap forward in a last gasp. However, the upward leap fades quickly and prices turn lower within a couple of days or weeks.

In many cases at the top of bottom or bottom of the move, an Island Reversal forms. In an up-move, for example, this occurs when an exhaustion gap has formed and prices trade in a narrow range for a couple of days before gapping to the downside in another Breakaway Gap.

The down-side Breakaway Gap (like the up-side one) will also generally follow an important price pattern, (in this chart it is a V-Top or Spike formation) and also signals the beginning of an important market move.

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TRAINING COURSE MANUAL

THE ELLIOTT WAVE THEORY

The Elliott Wave Theory is a popular method of analyzing stock and futures contract price movements on the charts. It is, however, a rather complicated method and we will cover it here only for informational purposes. Several books are listed in the bibliography for further information.

The Elliott Wave Theory was developed by Ralph Nelson Elliott (1871-1948). He was an accountant who specialized in railroad and restaurants. While recovering from a serious illness in the late 1920's, he developed his theory of stock market behavior. The theory shows some strong influence from the Dow theory. Elliott later teamed up with Charles Collins, who was then editor of a stock market service. Collins published Elliott's Wave Principle in 1938.

Elliott wrote his definitive work on the Wave Principle and it was entitled "Nature's Law – The Secret of the Universe". Elliott gave it this pretentious title because he believed that his stock market theory was part of a much larger natural law governing all of man's activities.

The Theory might have died but the banner was picked up by A. Hamilton Bolton. He published a 1960 work entitled "Elliott Wave Principle - - A Critical Appraisal". A. J. Frost and Robert Prechter then published a 1978 work entitled "Elliott Wave Principle: Key to Stock Market Profits". That book is today the definitive text on the subject.

There are two major newsletters available today that are based on the Elliott Wave Theory: "The Elliott Wave Theorist" and the "Elliott Wave Commodity Letter".

In its most basic form the theory says that the stock market follows a repetitive rhythm of a five-wave advance followed by a three-wave decline.

Chart 2-20 shows one complete cycle. It has a total of 8 waves; 5 up and 3 down. Waves 1, 3 & 5 are rising waves and are called impulse waves. Waves 2 & 4 are called corrective waves because they correct waves 1 & 3. After the 5 wave advance, the 3 wave correction begins with waves labeled as a, b & c.

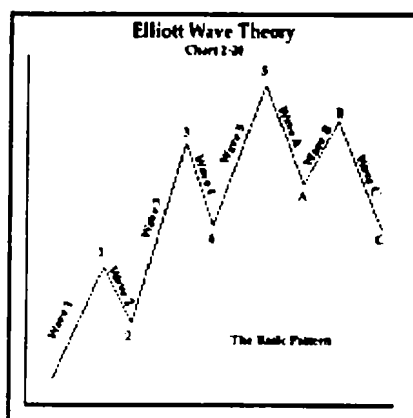
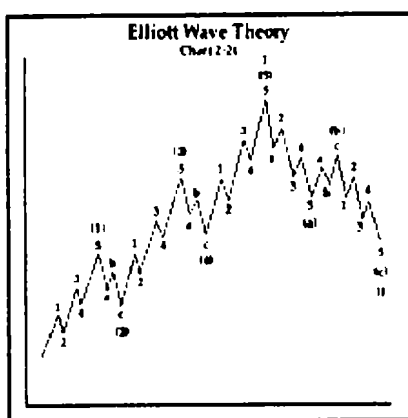


Chart 2-21 shows a series of 8 waves (5 up and 3 down) each of which is then sub-divided into lesser series or degrees of waves. Elliott said there were 9 different degrees of waves ranging from the Grand Supercycle spanning 200 years to a subminuette covering only a few hours.



It's important to note, however, that all the degrees have the same 8-wave pattern. Each wave subdivides into waves of one lesser degree, which in turn can be subdivided into waves of lesser degrees.

The chart shows three of these degrees. The largest of the waves are shown as I & II, which are only 2 waves of a five-way up-trend. Wave I is broken into five waves (1) thru (5). (1), (3), (5) are impulse waves and (2) & (4) are corrective waves. Wave (1) is broken into five waves 1-5. 1, 3 & 5 are impulse waves, 2 & 4 are corrective waves. Wave II which is a corrective wave of wave I is broken down into three waves; a, b & c.

On the corrective wave II the down leg (a) is broken down into five waves because it is moving in the direction of the next larger wave II and the wave (b) is broken into only three waves because it is a corrective wave moving in the opposite direction from the larger wave II.

Being able to determine between 3's and 5's is important because it tells what to expect next. A completed 5-wave move for example, usually means that only part of a larger wave has been completed and there is more to come. One of the most important rules to remember is that correction can never take place in 5 waves. In a bull market, for example, if a 5-wave decline is seen, this means that it is probably on the first wave of 3-wave decline and that there is more to come on the downside. In a bear market, a 3-wave advance should be followed by a resumption of the downtrend. A 5-wave rally would warn of a more substantial move to the upside and might possibly even be the first wave of a new bull trend.

Elliott's 5-wave advance including 2 correction waves fits in well with Dow's 3-wave advance in a bull market. Elliott felt that he had gone far beyond Dow's theory.

It is interesting to note the influence of the sea on both men. Dow compared the major, intermediate and minor trends to tides, waves and ripples and Elliott refers to ebbs and flows and named his theories the "wave" theory.

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FIBONACCI NUMBERS

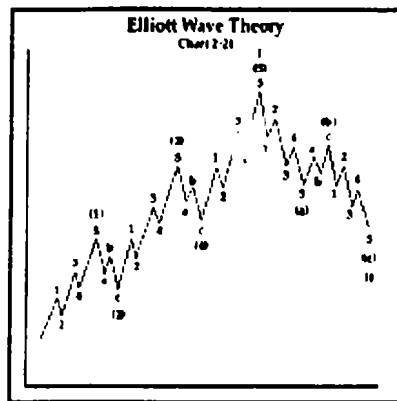
Fibonacci numbers appear frequently in technical analysis so it is important to know something about them.

Leonardo Fibonacci was a 13th century mathematician who discovered a number sequence that has many interesting relationships. The number sequence is shown on Chart 2-22. The sequence is: 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, etc. on to infinity. The various relationships between the numbers is also shown.

Chart 2-22
1. 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144,.....Infinity
RELATIONSHIPS (Best known)
1. Sum of any two consecutive numbers equal the next higher number. For example: 1+2=3, 2+3=5, 3+5=8, etc.
2. Ratio of any number to the next higher number approaches .618 For example: 1/2=.5, 2/3=.67, 3/5=.60, 5/8=.625, 8/13=.615, 13/21=.619, etc.
3. Ratio of any number to the next lower number approaches 1.618 (the inverse of .618) For example: 13/8=1.625, 21/13=1.615, 34/21=1.619
4. Ratio of alternate numbers approach 2.618 or its inverse of .382 For example: 13/5=.26235, 34/13=2.6154, etc.

Fibonacci is actually only re-discovered the sequence because Greek and Egyptian mathematicians were already using it. The Greeks called it the Golden Mean and the Egyptians called it the Golden Ratio. Both the Greeks and the Egyptians already knew that the numbers had application in music, art, architecture and biology. The Greeks used the Golden Mean in constructing the Parthenon and the Egyptians used the Golden Ratio in constructing the pyramids at Giza.

To see the application of the ratios to prices and waves, we have to re-use Chart 2-21 from the Elliott Wave Theory description. Because in the Elliott Wave Theory only one of the three impulse waves ever extends (i.e., gets longer by breaking down into its own 5-wave cycle), the other two are equal in time and magnitude. Where waves 1 & 3 are about equal, and the wave 5 is expected to extend, a price objective can be obtained by measuring the distance from the bottom of wave 1 to the top of wave 3, multiplying by 1.618 and adding the result to the bottom of 4.



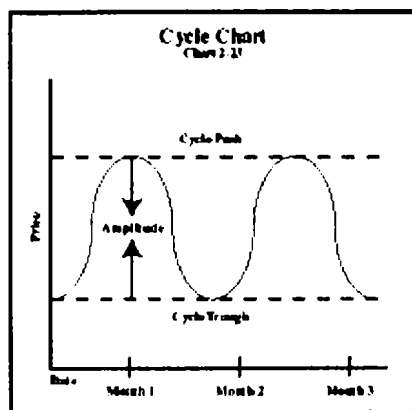
These numbers can also be applied to retracements as we will see later in the course. Retracements are the degree to which prices recover part of a previous loss or gain, i.e., the prices retrace part of a prior move. Prices tend to retrace the same percentages as numbers in the Fibonacci series: especially the vales of .618 and .382

TRAINING COURSE MANUAL

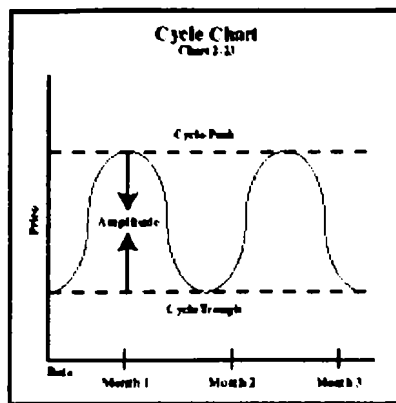
CYCLE THEORY

Cycle theory declares that the price-time relationships observable in price charts can be analyzed by isolating the time variable. A cycle is defined as a recognizable price pattern or movement that occurs with a degree of regularity over a specific time interval. A cycle is most often associated with cycle low points and cycle high points. Measuring a cycle is as simple as taking the period of time between significant lows or highs and observing whether a time pattern of lows or highs exists. If stock shows a regularly occurring low point every five weeks, for example, then it is said to have a five-week cycle. It would not make a difference if the regularly occurring low points were each one higher than the last one.

There are three basic tenets of cycle analysis. First, while several different cycles may be observed for any single stock or commodity, the most influential cycle is the only one that should be isolated. Second, it is typical that the length of the cycle is proportional to the amplitude and significance of the cycle. Third, the higher the number of cycles which reach a peak or trough at around the same time, the greater the significance of the peak or trough.



It is typical of cycle analysis that the high points within a series of cycle lows will occur irregularly. By monitoring the translation occurring at the midpoint of the cycle, the strength of the ensuing part of the cycle can be gauged. For example, a cycle high that occurs before the midpoint between two cycle lows would be expected to lead to a stronger than usual decline toward the next cycle low. A cycle high that occurs at the midpoint between two cycle lows would be expected to lead to a normal decline toward the next cycle low. A cycle high that occurs after the midpoint between two cycle lows would be expected to lead to a weaker than expected decline toward the next cycle low.



Advanced methods of measuring cycles allow one to isolate more than one cycle. Fourier analysis is one method used to isolate the length, amplitude, and phases of cycles. Systematic reconnaissance is a technique that tests for periods requested. One of the simpler methods for finding cycles is the deviation from trend method. The deviation from trend method requires that one divide the price by moving average that has been shifted backward by half the length of the moving average (i.e., a nine-period moving average would be shifted back to divide the price of the fifth period).

QUIZ FOR LESSON 2

1. Types of price charts are:

- A. ☐ Daily bar charts
 - B. ☐ Line charts
 - C. ☐ Point & Figure charts
 - C. ☐ All of the above
-

2. A daily bar chart shows prices on the vertical y-axis and days on the horizontal x-axis.

- ☐ True
 - ☐ False
-

3. Daily Open Interest for a futures contract may be plotted along the bottom of the daily bar chart as a series of vertical bars.

- ☐ True
 - ☐ False
-

4. Point and Figure charts show reversals more clearly than do bar charts.

- ☐ True
 - ☐ False
-

5. Point and figure charts are developed in relation to only price changes; time is not relevant.

- ☐ True
 - ☐ False
-

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-
6. On a 1 x 3 Point and Figure chart, the 1 refers to the number of columns to move over to record a reversal.

☐ True

☐ False

7. A Resistance Point is a price level above or below the current market where significant selling interest should emerge.

a. ☐ Above

b. ☐ Below

8. A Support Point is a price level above or below the current market where buying interest should emerge.

☐ Above

☐ Below

9. When the Support and Resistance points are penetrated, they can reverse roles.

☐ True

☐ False

10. An Up Trend is defined as a series of successively higher highs and higher lows.

☐ True

☐ False

11. A Bull Trend Line is normally drawn through a series of highs.

☐ True

☐ False

12. The three classifications of a trend are Major, Minor and Intermediate.

☐ True

☐ False

13. What is the minimum number of points that can define a tentative trend line?

a. ☐ Two

b. ☐ Three

c. ☐ Four

14. Once a trend is in motion it will tend to stay in motion in the same direction.

☐ True

☐ False

15. If there were an up-move from a price level of 100 to a price level of 200, and then the price fell back to a level of 150, this would be a retracement of:

☐ 25%

☐ 50%

☐ 75%

16. A top reversal day is defined as a day in which there was first a higher high and then a lower close than the preceding day.

☐ True

☐ False

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17. A price gap is an area on the price chart in which only a little trading took place.

☐ True

☐ False

18. An Exhaustion Gap tends to form halfway up or down a strong price move.

☐ True

☐ False

19. The basic premise of the Elliott Wave Theory is that there is a repetitive rhythm of 5 rising waves followed by three falling waves.

☐ True

☐ False

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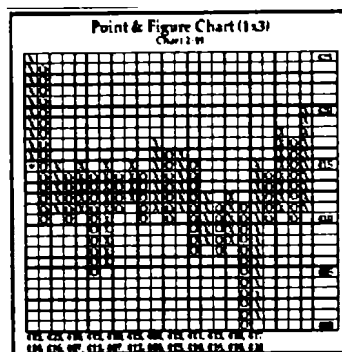
LESSON 2 – CHARTING FUNDAMENTALS

Point & Figure Charts

Although the bar chart is the most popular type of chart in use today, the Point & Figure chart is older by at least 15 years, dating back to the 1880's. The P & F chart uses X's to show prices that are moving up and O's to show prices that are moving down.

The term point and figure comes from the 1920's when technical analysts plotted actual prices (figures) on the charts. Then in the 1930's they began to use X's which were called points. Victor de Villiers in his 1933 classic "The Point and Figure Method of Anticipating Stock Price Movements" began to call the method by both names and the double name stuck.

While bar charts show the high, low and closing price for each trading day, P & F charts show only price changes without regard to time. No entry is made on the chart until a price changes takes place.



To construct a Point & Figure chart you first have to choose the correct graph paper. Graph paper with 10 lines to the inch with every 5th line darkened for easier plotting is ideal for most cases.

Each vertical box (not the line) is assigned a value. On Chart 19 we chose prices from \$500 to \$540 with each vertical box having a value of \$1.

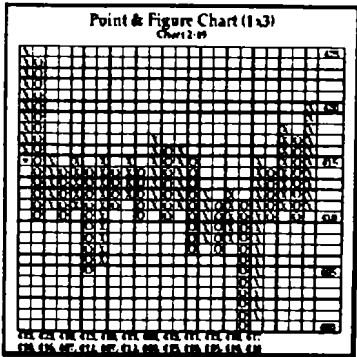
Next it is necessary to decide the number of boxes the price must move up or down before a reversal is recorded. In Chart 19 prices must move up or down \$3 (i.e., by three boxes) before a reversal is recorded. Chart 19 is therefore called a 1 x 3 Point & Figure chart.

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To see how this chart is constructed, follow along to see how the boxes are filled in. The series of price moves to be used in this example are shown at the bottom of the chart reading from left to right. The starting price of the contract or stock being charted is \$515 and that is marked with a dot in the box with the value 515. Moving to the right in the list of prices, the next trade took place at the higher price of \$525 so we put x's in each box up to the \$525 level. The next trade took place at the higher price of \$525 so we put x's in each box up to the \$525 level. The next trade took place at the lower level of \$510 which was a reversal of more than \$3 so move over to the next column and fill in the boxes with o's down to the \$510 level. The next trade was higher at \$515 and since it was again a price reversal of more than \$3, we move over to the next column and put x's in the boxes up to the \$515 level.

If the next trade took place in the same up or down direction, then we would just continue putting x's or o's in the boxes. If a reversal of less than \$3 took place, it would be ignored and nothing would be plotted on the chart. When the \$3 or more reversal finally took place, we would move to the next column and continue the chart.

If the commodity or stock being charted had wider price swings and/or more frequent reversals, you could change the scale. For example, you could give each box a greater value – like \$2/box in the Chart 2-19 example. In addition, you could record reversals less frequently – like after a \$6 move in the opposite direction. If you were to choose these values, then the chart would be called a 2x6 P&F chart. To go on with the example, you could make box \$4 and each reversal k\$12 and this would be a 4 x 12 P&F chart. This way you could make any type chart that best met your needs.



The only value shown on the chart is the price on the vertical Y-axis. However, if you wanted to keep track of time for some reason, you could put times across the bottom.

P & F charts are used primarily for intra-day trading in two main ways. One is to watch for price reversals on the vertical scale and the patterns they produce. The other is to count horizontally to determine price objectives.

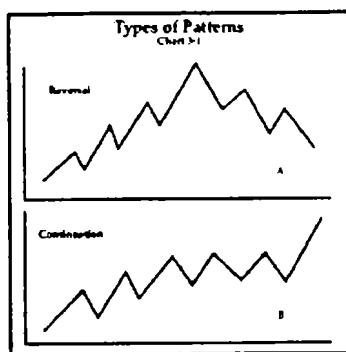
The analysis of P & F charts uses many of the same patterns used with bar charts so it isn't necessary to learn a lot of new techniques.

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CHART PATTERNS

TYPES OF PATTERNS

Price patterns are formations that appear on price charts of stocks or commodities. They can be classified into different categories and they have predictive value. There are basically two types of patterns, reversal patterns and continuation patterns. A reversal pattern as shown in Chart 3-1A indicates that an important reversal in the trend is taking place. There will usually be a particular place in the pattern where the reversal actually takes place. A continuation pattern as shown in chart 3-1B indicates that the market is only pausing for a while, possibly to correct a near-term overbought or oversold condition, after which the existing trend will be resumed.



Reversal patterns have several characteristics. One is that there must always be a trend already in existence, either up or down. Another characteristic is that the larger the pattern, the greater the subsequent price move. Large in this sense refers to both the width and the height of the pattern. Width measures the amount of time required to build and complete the pattern. Height measures the size of subsequent price move.

Still another characteristic is that topping reversal patterns are usually shorter in duration and more volatile than bottoming patterns, and are therefore harder to catch. Bottoms, on the other hand, usually have smaller price ranges and take longer to build.

One additional characteristic of chart patterns is that volume is very important and must be watched carefully. Volume should generally increase in the direction of the trend. Volume is also an important confirming factor in the completion of the price pattern. Each pattern, however, has its own requirements so volume will be discussed in each of the patterns.

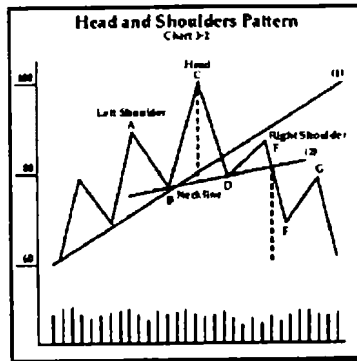
REVERSAL PATTERNS

Head and Shoulders

Probably the best-known reversal pattern is the head and shoulders. A typical formation is shown in Chart 3-2. Volume is shown at the bottom of the chart. The higher the bar, the greater the volume.

As the price moves up on its way up to Point A, the up trend marked as (1) is proceeding normally with no sign of a top. Volume expands as the prices move to new highs which is normal. From the peak at A, there is a corrective dip to the support level at the trend line at Point B on lighter volume. This is also normal. The rally back up to a higher peak at C is also normal in an up trend.

But now prices fall to Point D and in doing so they penetrate support at the trend line. The break below an important support level is often the first warning that something is happening.



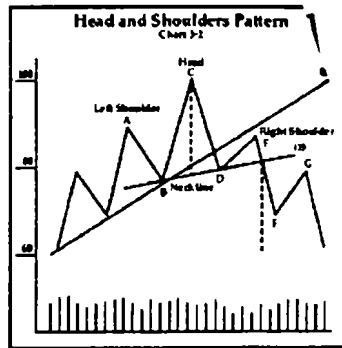
Now the market rallies to Point E but isn't able to reach the previous peak at C. This type of rally will often retrace $\frac{1}{2}$ to $\frac{2}{3}$ of the previous decline. On this chart, this is from C to D. To continue an up trend, recall that each high point must exceed the high point of the rally preceding it. And since the rally didn't get up to price level C, the up trend is faltering.

However, in spite of warning signs, i.e., a lower peak at E and a penetration of the trend line at D, we still only know that the trend has shifted from up to sideways. This might be enough to justify liquidating long positions, but not necessarily enough to justify new short sales.

Based on the pattern so far, we can now construct a new and flatter trend line (2) through B and D. If the pattern actually turns out to be a head and shoulders pattern, this line will

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be called the “neckline.” A neckline in an up trend will usually have a slight upward slope but that is not critical.



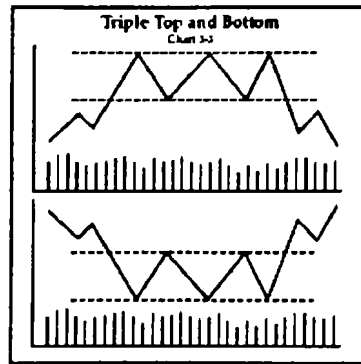
The final and deciding factor in the formation of a head and shoulders pattern is if the price now closes below the neckline, which it does in this example by falling to Point F. It is important that this move through the neckline be confirmed by an increase in volume, as it is in this example. At this point there is often a bounce back up (to G in this example) but is usually short lived and prices continue lower.

While this is helpful to know that the trend line has reversed, we also want to know how far the reversal will go. The way to do this is the measure the vertical distance from the head C to the neckline. On Chart 3-2 that is from 100 down to 80 or 20 points. Now measure that same vertical distance down from where the price line crossed the neckline. On this chart, it is from the neckline crossing at about 82 down to 62. This should be the approximate price at which the trend will again reverse and turn to the upside.

A head and shoulders pattern can also appear as a bottom reversal pattern. When this occurs it is called an inverse head and shoulders. It is a mirror image of the topping pattern in all respects.

The triple top or bottom pattern is a slight variation of the H & S pattern but occurs much less often. The main difference is that in a triple top and bottom the three prices of what would have been the head and shoulders are all at about the same level. Sometimes there could be an argument as to whether it is a H & S or a triple top pattern, but it's not too important since both patterns imply the same thing.

Volume tends to decline with each successive and should increase at the breakdown point, i.e., the point at which prices break through the line connecting the two troughs.

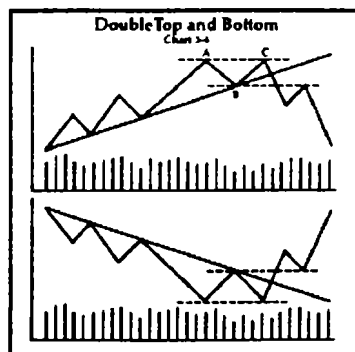


All the other ingredients of the triple top and bottom are the same as the head and shoulders; there is a trend in place, the left peak occurs on higher volume followed by a corrective dip, there is a rally to a new or equal high on lighter volume, there is a decline down to the previous low, there is third rally on even lighter volume to an equal high, there is a close below previous the two lows on significantly heavier volume, and there is a return move to near the previous two lows.

The measuring technique for the triple top and bottom is the same as for a head and shoulders pattern except the line connecting the two lows is used as measuring point.

Double Top and Bottom

The double top and bottom are very common patterns, occurring second only to the head and shoulders pattern in frequency. They are sometimes called the “M” and “W” pattern due to their appearance. They are similar to the H & S and Triple Top/Bottom patterns except they have only two peaks.



Real life double tops are usually not perfect, i.e., the two peaks may not be at exactly the same level. This is not too serious if the 2nd peak doesn't quite reach the 1st, but is quite serious if 2nd peak exceeds the 1st. If this happens it may mean that the trend is continuing rather than reversing.

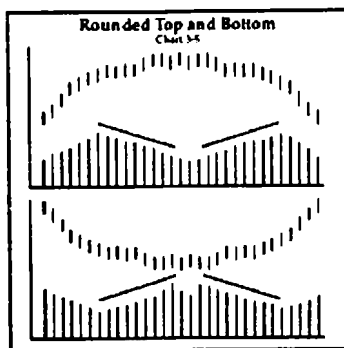
Measurement of the size of the price move is the height of pattern measured from a line connecting the two tops down to the low of the middle trough at Point B. This same distance should be measured from Point B and this should be the point at which prices turn up again.

A double bottom is a mirror image of the double top, but volume is more important on the upside breakout.

Rounded Top and Bottom

A rounded bottom is sometimes called a saucer or bowl and a rounded top is sometimes called an inverted saucer or bowl. These patterns occur less frequently than the other reversal patterns. Usually volume diminishes as the market makes its gradual turn and then increases as the new direction takes hold.

On a rounded bottom there is often a burst of activity right at the bottom of the pattern. Sometime a higher platform of both volume and price occurs. There is no clear-cut point at which the pattern is complete. Furthermore, there are no precise measuring rules so it is necessary to rely on other technical tools.

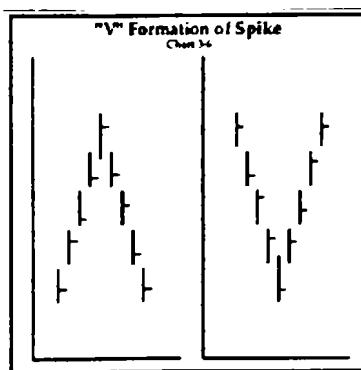


V-Formation Spike

Perhaps this pattern shouldn't really be called a pattern at all because it occurs so quickly that it is often not obvious until after it has formed. This pattern usually occurs after a runaway price situation when there have been few corrections along the way, there have been several limit-up moves and gaps. This is because an over-heated or over-extended

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market has a way of snapping back like a rubber-band with little or no warning. This steep or runaway trend is the main pre-condition for a V or Spike Reversal.



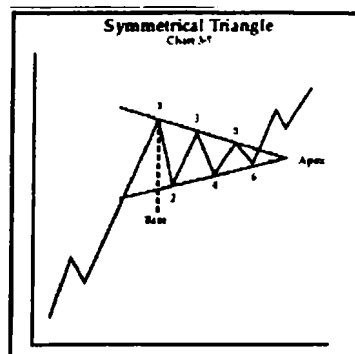
The actual price reversal is characterized by a key reversal day on heavy volume and perhaps even an island reversal. The prices that day will also often show up as an outside-day-down. The subsequent decline usually retraces 1/3 to 1/2 the prior up trend.

Continuation Patterns

Let's turn now to continuation patterns. Continuation patterns usually indicate that the sideways price action is nothing more than a pause in the prevailing trend, and that the next move will be in the same direction as the overall trend. While reversal patterns usually take much longer to build and represent major trend changes, continuation patterns are usually shorter in duration and more accurately classified as near-term or intermediate-term patterns.

Symmetrical Triangle

A symmetrical triangle is formed when two trend lines are converging. The vertical line measuring the height of the triangle is called the base and the point where the lines converge is called the apex. In Chart 3-7 the trend lines are drawn through points 1, 3, & 5 and through points 2, 4 & 6. The minimum requirement for a triangle is four reversal points, but it will usually have six as shown here.



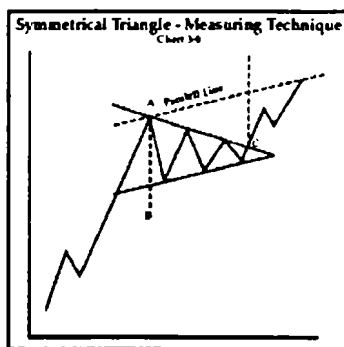
Prices oscillate between the two trend lines in smaller and smaller ranges. When the price breaks out from the triangle either up as shown here, or down, the pattern is completed. The pattern itself is neutral but the breakout is usually in the direction of the previous trend.

There is a time limit to this price action and the pattern will usually last 1-3 months. Generally, prices will break out in the direction of the trend somewhere between $\frac{1}{2}$ and $\frac{3}{4}$ of the distance from the base to the apex. If prices remain within the triangle beyond the $\frac{3}{4}$ point, the triangle begins to lose significance and prices will probably just continue to drift out beyond the apex.

When the move outside the triangle takes place it should be a closing price and not just an intra-day move. When that happens, the penetrated trend line becomes a support or resistance level. Volume should diminish as the price swings narrow within the triangle but the volume should then increase at the penetration and again at the high as the trend resumes. Volume is again more important on the upmove than on the downmove.

There are two ways to measure the price target after a breakout has occurred. One way is to measure the height of the triangle at the base and then project that same distance up or down from the breakout point.

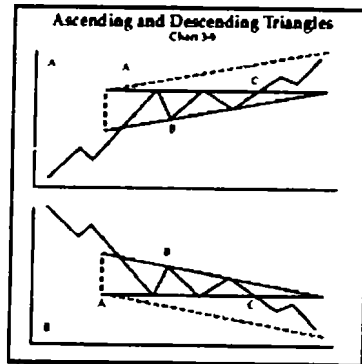
The other way is to measure the price target is to draw a line above or below and parallel to the previous trend line. This is the case whether the previous trend was up or down. The measurement is then up or down from the breakout point to the parallel line. This method will generally provide a more conservative measurement than using the base line method.



Ascending and Descending Triangles

The ascending triangle shown in Chart 3-9A is characterized by a rising trend line as the lower boundary and by a flatter (but still rising) line as the upper boundary. Overall a rising or ascending pattern is considered to be bullish.

Like the symmetric triangle the ascending triangle also requires at least 4 reversal points but usually has 6. The pattern usually occurs during a rising market and breaks out to the up-side with decisive close about the flatter upper boundary line. At the time of the breakout there is usually an increase in volume. Following the breakout there is often a return to the upper line, which by then has become a support level. That return generally occurs on light volume.



The descending triangle as shown in Chart 3-9B is the mirror image of the ascending triangle. It has a declining upper trend line with a flatter lower boundary line. It is a bearish pattern in that it is usually resolved to the downside with a decisive close below the lower trend line on increased volume.

Measurement of the extent of the price move for either triangle is done by measuring the vertical height at the widest part of the triangle and projecting that same distance up or down from the breakout point.

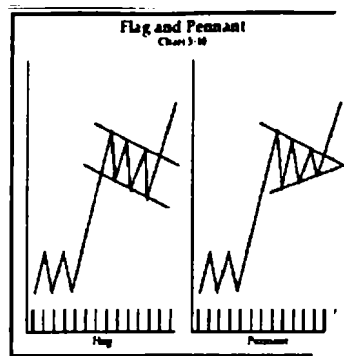
Flag and Pennant

Flag and pennant patterns are very common continuation patterns and are treated here together because they are similar in appearance tend to show up about the same place in the existing up-trend, and have the same volume and measurement treatment. These are among the most reliable patterns and rarely produce a reversal.

A bullish flag pattern as shown on Chart 3-10 is formed with a short corrective downtrend line and a parallel line connecting the lows. The flag tends to slope against the prevailing trend, which in this case is a bull trend. A pennant has converging lines and looks like a small symmetrical triangle. It is generally a sideways pattern with no slope. It can occur during either an up or downtrend but is more frequent in an up-trend.

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A major characteristic of both these patterns is that they are preceded by a sharp and almost straight-line rise or fall. The straight line is called the flagpole.



Both patterns are generally completed in two or three weeks with the breaking of the upper or lower line with the breaking of the upper or lower line followed by a resumption of the prevailing trend. Volume should dry up noticeably as the patterns are forming and should increase at the breakout with upside volume more critical as usual.

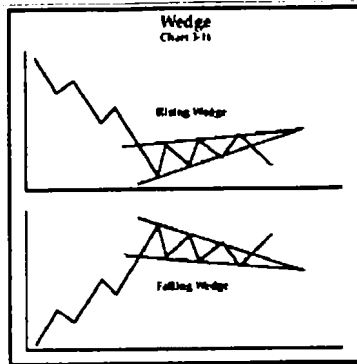
Measurement is the same for both patterns in that they are said to "fly at half mast", i.e., they tend to appear halfway up or down along the primary move. Measure the distance from the point the current trend began by penetration of an important support or resistance. Then measurement that same vertical distance up or down from where the price broke out from the pattern. This is about the level where prices will reverse direction.

Wedge

The wedge formation is very similar to a symmetrical triangle in terms of both its shape and the amount of time it takes to form. Two converging lines, the trend line and the line connecting the highs and lows come together at an apex. Generally, however, the wedge will have a noticeable slant either up or down. As a rule the slant will be against the prevailing trend line. Therefore, a falling wedge is considered bullish and a rising wedge is considered bearish. Wedges appear most often within an existing trend line but may sometimes appear at a top or bottom. If that happens the pattern may be signaling a possible trend reversal.

Like a symmetrical triangle, a wedge must have at least four reversal points but will usually have six. The pattern will usually last between one and three months. The pattern will usually develop to at least 2/3 of the way to the apex before the price will breakout. Unlike the symmetric triangle, however, the wedge pattern may go all the way to the apex before resolving itself.

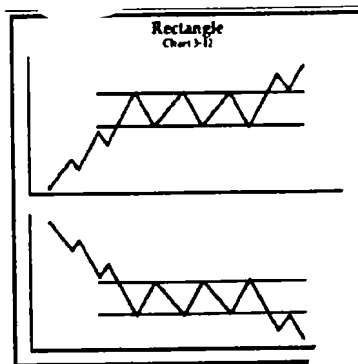
Volume should decrease during the formation of the wedge and increase on the breakout.



Rectangle

The rectangle pattern represents a pause in the trend in which prices move sideways between two parallel horizontal lines. The formation is also referred to as a trading range, a congestion area, or a consolidation period.

The pattern is usually resolved in the direction of the prevailing trend. For forecasting purposes, it can be viewed as being similar to the symmetric triangle except that it has flat instead of converging lines. A decisive close outside either the upper or lower boundary indicates the completion of the rectangle and points the direction of the new trend.



One must always be on the alert that the rectangle pattern doesn't turn into a triple top or bottom and become a reversal pattern. An important clue to watch for is the volume of trading during the formation of the pattern. As the price moves up and down it is important to note whether the heavier volume is on the up moves or on the down moves. For example, in a major up-trend, if the volume is heavier on the up-moves, the pattern is probably a continuation of the up-trend. If the volume is heavier on the down moves, the pattern should be considered as a warning of a possible trend reversal in the works.

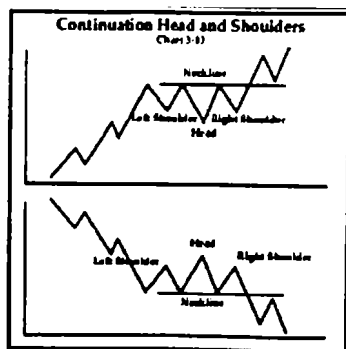
The most common measuring technique is to measure the height of the price range and then measure the same distance up or down from the breakout point. Breakout volume and return probabilities are the same as for other patterns. There will generally be increased volume on a breakouts but it is most important on upside. After the breakout, the upper or lower levels of the pattern become support or resistance levels. Prices will probably return to the upper or lower levels of the pattern.

Continuation Head and Shoulders

The Continuation Head and Shoulders pattern is an upside-down H & S pattern. This makes it easy to differentiate it from the real head and shoulders pattern.

This pattern is also similar to the horizontal rectangle pattern except that the middle trough in an up trend is lower than either of the two shoulders and the middle peak is higher than the two shoulders in a downtrend. Once the pattern has formed, the neckline can be drawn as usual and the pattern interpreted as real head and shoulders except, of course, that it is upside down and that the trend is likely to continue instead of reverse. The trend is resumed with the breaking of the neckline.

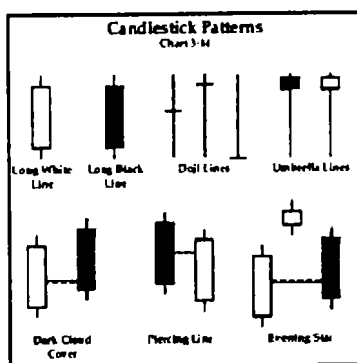
The volume and measuring criteria are also similar to the real head and shoulders but the measuring reliability is not as good as the reversal pattern and the volume requirements are not as important.



Candlestick Patterns

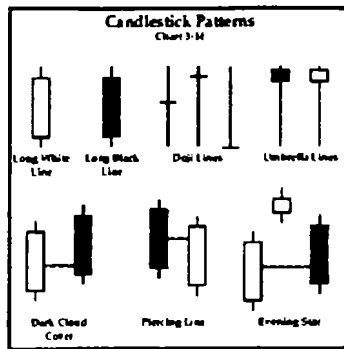
Candlestick charting is a variation of bar charting that uses the open, high, low and closing prices to create short-term trading patterns. A Candlestick bar is constructed in three steps. The first step is to draw a thin line from the daily high to the daily low. The second step is to draw a rectangle that overlays the thin line from the opening price to the closing price. The third step is to color the rectangle white if the closing price is above the opening price and to color the rectangle black if the closing price is below the opening price. A chart full of candlestick bars will exhibit a great variety of patterns.

There are five single-bar candlestick patterns. The first pattern is the "long white line" in which the opening is near the low and the close is near the high. The second pattern is the "long black line" in which the opening is near the high and the close is near the low. The third pattern is the "doji" in which the opening and closing prices are identical while the range beyond the rectangle, or shadows, is extended. The fourth pattern is the "umbrella line" in which the rectangle, or real body, is narrow and develops near the high end of the daily range. The fifth pattern is the "spinning top" in which the trading range is very small in comparison with the days around it.



Chartists who use candlestick patterns appreciate the larger amount of information that a set of candlestick bars convey compared to a set of bars on a bar chart. While bar charts are normally used to find patterns that take weeks to develop, a candlestick chart can be used to identify patterns of only a few days duration. The more complex construction of candlestick bars, with the real bodies and shadows, allows for a greater variety of short-term price patterns.

Please refer to the candlestick diagrams while reading the following description of candlestick patterns and their significance.



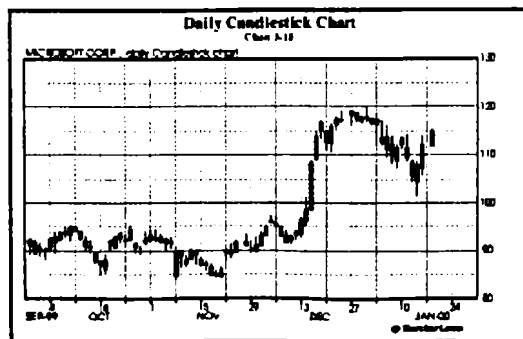
An umbrella line that occurs after a rally is a “hanging man.” The implication of the hanging man is that it is a bearish pattern. The pattern is especially bearish after a prolonged up move.

An umbrella line that occurs after a decline is a “hammer.” The implication of the hammer is that it is a bullish pattern. The pattern is especially bullish after a prolonged downmove.

A two-day bearish reversal formation is called a “dark cloud.” It occurs when the black candlestick body of the second day closes below the midpoint of the range of the white candlestick of the first day.

A two-day bullish reversal formation is called a “piercing line.” It occurs when the white candlestick body of the second day closes above the midpoint of the range of the black candlestick body of the first day.

A two-day pattern that can be either bullish or bearish is called an “engulfing pattern.” The pattern is formed by two consecutive days when the real bodies do not have range extensions or shadows. The second day must have a lower low than the first day and a higher high than the first day. The engulfing pattern is bullish in a downtrend when the second day is a white body. The engulfing pattern is bearish in an up trend when the second day is a black body.



SEE CHART BELOW

A three-day reversal pattern that is bullish is called a “morning star.” The second day is a spinning top that is made on a gap while the third day is a long white line that closed at least halfway into the range of the black body of the first day.

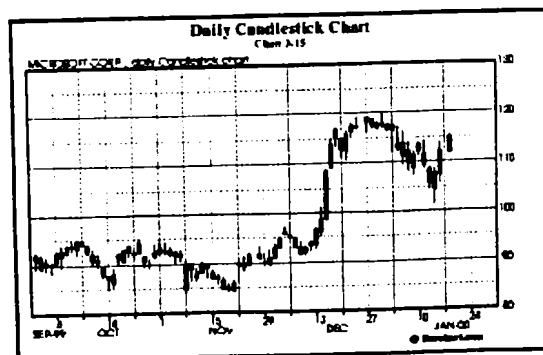
A three-day reversal pattern that is bearish is called an “evening star.” The second day is a spinning top that is made on a gap while the third day is a long black line that closes at least halfway into the range of the white body of the first day.

A bearish formation in which a long white line is followed by a small black real body that gaps above the first bar is called a “shooting star.”

A bullish formation that occurs within an up trend is called a “three rising formation.” A long white line is followed by three short white real bodies which are then followed by a second long white line that closes at a new high.

A bearish formation that occurs within a downtrend is called a “three falling formation.” A long black line followed by three short white real bodies which are then followed by a second black line that closes at a new low.

The examples given above are just a sampling of the many candlestick patterns that candlestick chartists rely upon. A quick look at chat 3-15 will demonstrate the added complexity of candlesticks. Candlestick charting has reached a wider audience as computer technology has made it easier to display the technique.



Confirmation of the Analysis

The interpretation of chart patterns is both an art and a skill. The only way to really learn how to use them is to study the literature, and then apply the principles day after day until they become second nature. It is really no different than learning anything else.

To be more confident that one's analysis is valid, it is valuable to use other data to try to confirm the initial analysis. This would involve comparing chart patterns and technical indicators of similar stocks or commodities. If the data being compared does not support the initial analysis, the initial analysis should be suspect.

One should also compare items in the same market. For example, if gold is being analyzed, check the other metals; if a grain is being analyzed, check the other grains; if a currency is being analyzed, check the other currencies. In the case of stocks, compare the stock to other stocks in the same industry such as financial, drugs, etc.

For commodity contracts one should compare all the delivery months of the contract being analyzed to make sure that they agree. A bullish or bearish pattern in one delivery month should be confirmed by similar readings in other delivery months. It is also useful to check the broad commodity indexes to see if they confirm the analysis of a specific market. A bullish pattern in a specific market is suspect if the broader market trends are down.

It is also important to check out all the technical indicators at ones disposal; moving averages, oscillators, trend lines, etc., to see if they all agree.

The more technical evidence that the analyst has to support his or her conclusions in a given market, the more confidence that analysis inspires and the better the odds of making the correct decision.

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QUIZ FOR LESSON 3

-
1. A Pennant chart pattern is a continuation pattern.

☐ True

☐ False

2. A Head and Shoulders forms only as a topping pattern.

☐ True

☐ False

3. A Head and Shoulders topping pattern is confirmed when the price closes below the neckline on heavier volume.

☐ True

☐ False

4. A Rising Wedge is a bearish pattern.

☐ True

☐ False

5. At the breakout from a continuation pattern, the new trend is most likely to continue in the same direction as the trend when the pattern was formed.

☐ True

☐ False

6. Continuation patterns tend to be longer in duration than reversal patterns.

☐ True

☐ False

7. Whenever there is a breakout from either a continuation or a reversal pattern, the breakout is usually onvolume.

☐ Heavier

☐ Lighter

8. When there is a breakout from a triangle pattern, the size of the price move can be estimated by measuring the height of the triangle and then measuring that same distance above or below the breakout point.

☐ True

☐ False

9. The following are reversal patterns: (more than one answer may apply):

☐ Double top

☐ Wedge

☐ Flag

☐ Head & Shoulders

10. In a V-Formation pattern, the actual price reversal is characterized by a key reversal day.

☐ True

☐ False

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11. In a symmetric triangle pattern there must be at least four reversal points.

☐ True

☐ False

12. Flags and pennants usually form near the top of a sharp up or down move.

☐ True

☐ False

13. In a symmetric triangle prices will usually move all the way to the apex before breaking out.

☐ True

☐ False

14. Ascending triangles usually appear during an up-trend.

☐ True

☐ False
